



[BILLING CODE 6560-50-P]

## **ENVIRONMENTAL PROTECTION AGENCY**

### **40 CFR Part 82**

**[EPA-HQ-OAR-2013-0263; FRL-9900-52-OAR]**

**RIN 2060-AR04**

### **Protection of Stratospheric Ozone: Adjustments to the Allowance System for Controlling HCFC Production, Import and Export**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** EPA is seeking comment on options for adjusting the allowance system controlling United States consumption and production of hydrochlorofluorocarbons (HCFCs). Under Title VI of the Clean Air Act, EPA is required to phase out production and import of these chemicals in accordance with United States obligations under the *Montreal Protocol on Substances that Deplete the Ozone Layer* (Protocol). Under the Protocol and the Clean Air Act, total United States HCFC production and consumption is capped, and will be completely phased out by 2030. Beginning January 1, 2015, United States production and consumption of all HCFCs must be no more than ten percent of the established cap. Existing EPA regulations prohibit production and consumption of HCFC-22 and HCFC-142b as of January 1, 2020. At that time, all other HCFC production and consumption must not exceed 0.5 percent of the cap, and is limited to use as a refrigerant in existing air conditioning and refrigeration equipment. Given these requirements, EPA is seeking comment on how best to implement the 2015 stepdown to no more than 10 percent of the cap. Since the beginning of the HCFC phaseout

program, the agency has tried to ensure a smooth transition out of HCFCs into non-ozone depleting alternatives. Essential to a smooth transition are the recycling and emissions reductions requirements mandated by section 608 of the Clean Air Act. This proposal also includes a request for comment on potential changes to regulations promulgated under that authority, found in 40 CFR 82 subpart F. In addition to taking comment on the implementation of phaseout requirements and proposed changes to section 608 regulations, the agency is also highlighting important Clean Air Act requirements that take effect in 2015, specifically the section 611 labeling requirements and the section 605 restrictions on HCFC use and introduction into interstate commerce.

**DATES:** Comments on this notice of proposed rulemaking must be received on or before **[INSERT DATE 60 DAYS AFTER PUBLICATION IN FEDERAL REGISTER]**, unless a public hearing is held. If a public hearing is held, comments must be received on or before **[INSERT DATE 75 DAYS AFTER PUBLICATION IN FEDERAL REGISTER]**. Any party requesting a public hearing must notify the contact listed below under **FOR FURTHER INFORMATION CONTACT** by 5 p.m. Eastern Daylight Time on **[INSERT DATE 15 DAYS AFTER PUBLICATION]**. If a public hearing is requested, the hearing will be held on January 23, 2014. If a hearing is held, it will take place at EPA headquarters in Washington, DC. EPA will post a notice on our website, [www.epa.gov/ozone/strathome.html](http://www.epa.gov/ozone/strathome.html), announcing further information should a hearing take place.

**ADDRESSES:** Submit your comments, identified by Docket ID No. **EPA-HQ-OAR-2013-0263**, by one of the following methods:

- [www.regulations.gov](http://www.regulations.gov): Follow the online instructions for submitting comments.
- Email: [a-and-r-docket@epa.gov](mailto:a-and-r-docket@epa.gov)

- Mail: Docket # EPA-HQ-OAR-2013-0263, Air and Radiation Docket and Information Center, United States Environmental Protection Agency, Mail code: 6102T, 1200 Pennsylvania Avenue NW, Washington, DC 20460
- Hand Delivery: Docket #EPA-HQ-OAR-2013-0263 Air and Radiation Docket at EPA West, 1301 Constitution Avenue NW, Room B108, Mail Code 6102T, Washington, DC 20004. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

*Instructions:* Direct your comments to Docket ID No. **EPA-HQ-OAR-2013-0263**. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at [www.regulations.gov](http://www.regulations.gov), including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through [www.regulations.gov](http://www.regulations.gov) or email. If you want to submit confidential comments, please send them to the individual listed in the **FOR FURTHER INFORMATION CONTACT** section. The [www.regulations.gov](http://www.regulations.gov) website is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to EPA without going through [www.regulations.gov](http://www.regulations.gov), your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid

the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA's public docket, visit the EPA Docket Center homepage at [www.epa.gov/epahome/dockets.htm](http://www.epa.gov/epahome/dockets.htm).

**FOR FURTHER INFORMATION CONTACT:** Elizabeth Whiteley by telephone at (202) 343-9310 or by email at [whiteley.elizabeth@epa.gov](mailto:whiteley.elizabeth@epa.gov), or by mail at United States Environmental Protection Agency, Stratospheric Protection Division, Stratospheric Program Implementation Branch (6205J), 1200 Pennsylvania Ave, NW, Washington DC, 20460. You may also visit the Ozone Protection website of EPA's Stratospheric Protection Division at [www.epa.gov/ozone/strathome.html](http://www.epa.gov/ozone/strathome.html) for further information about EPA's Stratospheric Ozone Protection regulations, the science of ozone layer depletion, and related topics.

**SUPPLEMENTARY INFORMATION:**

*Acronyms and Abbreviations.* The following acronyms and abbreviations are used in this document.

ANPRM – Advance Notice of Proposed Rulemaking

CAA – Clean Air Act

CAAA – Clean Air Act Amendments of 1990

CFC – Chlorofluorocarbon

CFR – Code of Federal Regulations

EPA – Environmental Protection Agency

FR – Federal Register

HCFC – Hydrochlorofluorocarbon

HVACR – Heating, Ventilating, Air Conditioning and Refrigeration

Montreal Protocol – *Montreal Protocol on Substances that Deplete the Ozone Layer*

MOP – Meeting of the Parties

MT – Metric Ton

ODP – Ozone Depletion Potential

ODS – Ozone-Depleting Substance(s)

Party – States and regional economic integration organizations that have consented to be bound by the *Montreal Protocol on Substances that Deplete the Ozone Layer*

RACA – Request for Additional Consumption Allowances

*Organization of This Document.* The following outline is provided to aid in locating information in this preamble.

- I. General Information
  - A. Does This Action Apply to Me?
  - B. What Should I Consider as I Prepare My Comments for EPA?
    - 1. Confidential Business Information (CBI)
    - 2. Tips for Preparing Your Comments
- II. Background
  - A. How Does the Montreal Protocol Phase Out HCFCs?
  - B. How Do the Clean Air Act and EPA Regulations Phase Out HCFCs?
  - C. What Sections of the Clean Air Act Apply to This Rulemaking?
- III. Clean Air Act Requirements that Begin in 2015
  - A. Labeling Requirements in Section 611(c) and (d)
  - B. Use and Sales Restriction in Section 605(a)
    - 1. What Is EPA Proposing for Existing Inventory of HCFC-225ca and HCFC-225cb?
    - 2. How is EPA Planning to Update Regulations to Account for Recent Changes to Section 605(a)?
  - C. Step Down to 10 Percent of Montreal Protocol Baseline
- IV. How Will EPA Determine Baselines for 2015-2019?
  - A. Using Existing Baselines
  - B. Consideration of Establishing Revised Baselines Using More Recent Production and Import Data
- V. How Is EPA Developing Allocation Levels for Each HCFC?
  - A. How Will EPA Determine the HCFC-22 Consumption Allocation?
    - 1. Using a Linear Drawdown From 2014 Allocation Levels

2. Determining the Allocation by Estimating Servicing Need and then Accounting for Need that Can Be Met by Sources Other than New Production
    3. Accounting for Existing HCFC-22 Inventory
  - B. How Will EPA Determine the HCFC-22 Production Allocation?
    1. Allocate the Maximum Production Allocation Allowed Under the Cap
    2. Allocate Approximately the Same Number of Production Allowances as Consumption Allowances
  - C. How Will EPA Determine the HCFC-142b Allocation?
  - D. How Will EPA Determine the HCFC-123 Allocation?
    1. Allocate 100 Percent of HCFC-123 Consumption Baseline Through 2019
    2. Allocate Less Than 100 Percent of HCFC-123 Consumption Baseline
  - E. How Will EPA Determine the HCFC-124 Allocation?
  - F. How Will EPA Determine the HCFC-225ca/cb Allocation?
  - G. What is EPA Proposing to Do With the HCFC-141b Exemption Program?
  - H. Other HCFCs that are Class II Controlled Substances
- VI. What Other Adjustments to the HCFC Allowance System is EPA Considering?
- A. Will EPA Consider Banning Dry-Shipped HCFC-22 Condensing Units?
  - B. How Will EPA Respond to Requests for Additional Consumption Allowances in 2020 and Beyond?
  - C. How Might EPA Maximize Compliance With HCFC Regulations?
- VII. What Modifications to Section 608 Regulations is EPA Proposing?
- A. Overview of Current Reclamation Standards
  - B. Benefits of Reclamation
  - C. Regulatory Changes that EPA is Proposing under Section 608 Authority
    1. Adoption of AHRI 700-2012 Standards
    2. Notification to EPA if Change in Business, Management, Location or Contact Information
    3. Reporting and Recordkeeping Requirements
    4. Technical and Process Information Required in Reclaimer Certification Application
    5. Expanded End Product Testing Requirements
- VIII. Statutory and Executive Order Reviews
- A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review
  - B. Paperwork Reduction Act
  - C. Regulatory Flexibility Act (RFA)
  - D. Unfunded Mandates Reform Act
  - E. Executive Order 13132: Federalism
  - F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments
  - G. Executive Order 13045: Protection of Children from Environmental Health and Safety Risks

H. Executive Order 13211: Actions that Significantly Affect Energy Supply, Distribution, or Use

I. National Technology Transfer and Advancement Act

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

## **I. General Information**

A. *Does This Action Apply to Me?*

This rule will affect the following categories:

- Industrial Gas Manufacturing entities (NAICS code 325120), including fluorinated hydrocarbon gas manufacturers and reclaimers;
- Other Chemical and Allied Products Merchant Wholesalers (NAICS code 424690), including chemical gases and compressed gases merchant wholesalers;
- Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing entities (NAICS code 333415), including air-conditioning equipment and commercial and industrial refrigeration equipment manufacturers;
- Air-Conditioning Equipment and Supplies Merchant Wholesalers (NAICS code 423730) , including air-conditioning (condensing unit, compressors) merchant wholesalers;
- Electrical and Electronic Appliance, Television, and Radio Set Merchant Wholesalers (NAICS code 423620), including air-conditioning (room units) merchant wholesalers;

- Plumbing, Heating, and Air-Conditioning Contractors (NAICS code 238220), including Central air-conditioning system and commercial refrigeration installation, HVACR contractors; and
- Refrigerant reclaimers, manufacturers of recovery/recycling equipment and refrigerant recovery/recycling equipment testing organizations.

This list is not intended to be exhaustive, but rather provides a guide for readers regarding the types of entities that could potentially be regulated by this action. Other types of entities not listed in this table could also be affected. To determine whether your facility, company, business organization, or other entity is regulated by this action, you should carefully examine these regulations. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the “**FOR FURTHER INFORMATION CONTACT**” section.

B. *What Should I Consider as I Prepare My Comments for EPA?*

*1. Confidential Business Information (CBI)*

Do not submit CBI information to EPA through [www.regulations.gov](http://www.regulations.gov) or [a-and-r-docket@epa.gov](mailto:a-and-r-docket@epa.gov). Submit CBI directly to the person listed in the “**FOR FURTHER INFORMATION CONTACT**” section. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

2. Tips for Preparing Your Comments

When submitting comments, remember to:

- Identify the rulemaking by docket number and other identifying information (subject heading, **Federal Register** date and page number).
- Follow directions - The agency may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.
- Explain why you agree or disagree, suggest alternatives and substitute language for your requested changes.
- Describe any assumptions and provide any technical information and/or data that you used.
- If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
- Provide specific examples to illustrate your concerns, and suggest alternatives.
- Explain your views as clearly as possible, avoiding the use of profanity or personal threats.
- Make sure to submit your comments by the comment period deadline identified.

## **II. Background**

### *A. How Does the Montreal Protocol Phase Out HCFCs?*

The *Montreal Protocol on Substances that Deplete the Ozone Layer* is the international agreement aimed at reducing and eventually eliminating the production and consumption of ozone-depleting substances (ODS). The United States was one of the original signatories to the 1987 Montreal Protocol, and ratified the Protocol on April 12, 1988. Congress then enacted, and President George H.W. Bush signed into law, the Clean Air Act Amendments of 1990 (CAAA)

to ensure that the United States could satisfy its obligations under the Montreal Protocol. Title VI of the Act (codified as 42 U.S.C. Chapter 85, Subchapter VI) is titled Stratospheric Ozone Protection; it includes restrictions on production, consumption, and use of ODS that are subject to acceleration if “the Montreal Protocol is modified to include a schedule to control or reduce production, consumption, or use . . . more rapidly than the applicable schedule” prescribed by the statute. Both the Montreal Protocol and the Clean Air Act (CAA) define consumption as production plus imports minus exports.

In 1990, as part of the London Amendment to the Montreal Protocol, the Parties identified HCFCs as “transitional substances” to serve as temporary, lower ozone depletion potential (ODP) substitutes for chlorofluorocarbons (CFCs) and other ODS. EPA similarly viewed HCFCs as “important interim substitutes that will allow for the earliest possible phaseout of CFCs and other class I substances<sup>1</sup>” (58 FR 65026, December 10, 1993). In 1992, through the Copenhagen Amendment to the Montreal Protocol, the Parties created a detailed phaseout schedule for HCFCs, beginning with a cap on consumption for developed countries not operating under Article 5 of the Montreal Protocol (non-Article 5 Parties), a schedule to which the United States adheres. The consumption cap for each non-Article 5 Party was set at 3.1 percent (later tightened to 2.8 percent) of a Party’s CFC consumption in 1989, plus a Party’s consumption of HCFCs in 1989 (weighted on an ODP basis). Based on this formula, the HCFC consumption cap for the United States was set at 15,240 ODP-weighted metric tons, effective January 1, 1996. This cap is the United States HCFC consumption baseline.

The 1992 Copenhagen Amendment created a schedule with graduated reductions and eventual phaseout of HCFC consumption (Copenhagen, 23-25 November, 1992, Decision IV/4).

---

<sup>1</sup> Class I refers to the controlled substances listed in appendix A to 40 CFR part 82 subpart A. Class II refers to the controlled substances listed in appendix B to 40 CFR part 82 subpart A; HCFCs are class II substances.

The schedule for non-Article 5 Parties initially called for tighter consumption caps based on a Party's baseline, as follows: an annual consumption cap equal to 65 percent of baseline in 2004, 35 percent of baseline in 2010, 10 percent of baseline in 2015, and 0.5 percent of baseline in 2020, with a complete HCFC phaseout by 2030.

The Copenhagen Amendment did not cap HCFC production. In 1999, the Parties created a cap on production for non-Article 5 Parties through an amendment to the Montreal Protocol agreed to at the Eleventh Meeting of the Parties (Beijing, 29 November – 3 December 1999, Decision XI/5). The cap on production was set at the average of: (a) 1989 HCFC production plus 2.8 percent of 1989 CFC production, and (b) 1989 HCFC consumption plus 2.8 percent of 1989 CFC consumption. Based on this formula, the HCFC production cap for the United States was set at 15,537 ODP- MT, effective January 1, 2004. This cap is the United States HCFC production baseline.

To further protect human health and the environment, the Parties to the Montreal Protocol adjusted the Montreal Protocol's phaseout schedule for HCFCs at the 19<sup>th</sup> Meeting of the Parties in September 2007. As a result of the 2007 Montreal Adjustment (reflected in Decision XIX/6),<sup>2</sup> the United States and other non-Article 5 parties were obligated to reduce HCFC production and consumption to 25 percent of baseline by 2010, rather than 35 percent as previously required. The other milestones remain the same. The adjustment also resulted in a phaseout schedule for HCFC production that parallels the consumption phaseout schedule. All production and consumption for non-Article 5 Parties must be phased out by 2030.

Decision XIX/6 also adjusted the provisions for Parties operating under paragraph 1 of Article 5, considered as developing countries under the Protocol: (1) to set HCFC production and

---

<sup>2</sup> The adjustment entered into force and became binding for all Parties on May 14, 2008.

consumption baselines based on the average 2009-2010 production and consumption, respectively; (2) to freeze HCFC production and consumption at those baselines in 2013; and (3) to add stepwise reductions to 90 percent of baseline by 2015, 65 percent by 2020, 32.5 percent by 2025, and an average of 2.5 percent for 2030-2039. All production and consumption for Article 5 Parties must be phased out by 2040.

In addition, Decision XIX/6 adjusted Article 2F to allow non-Article 5 Parties to produce “up to 10 percent of baseline levels” for export to Article 5 countries “in order to satisfy basic domestic needs” until 2020.<sup>3</sup> Paragraph 14 of Decision XIX/6 notes that no later than 2015, the

---

<sup>3</sup> Paragraphs 4-6 of adjusted Article 2F read as follows:

- “4. Each Party shall ensure that for the twelve-month period commencing on 1 January 2010, and in each twelve-month period thereafter, its calculated level of consumption of the controlled substances in Group I of Annex C does not exceed, annually, twenty-five per cent of the sum referred to in paragraph 1 of this Article. Each Party producing one or more of these substances shall, for the same periods, ensure that its calculated level of production of the controlled substances in Group I of Annex C does not exceed, annually, twenty-five per cent of the calculated level referred to in paragraph 2 of this Article. However, in order to satisfy the basic domestic needs of the Parties operating under paragraph 1 of Article 5, its calculated level of production may exceed that limit by up to ten per cent of its calculated level of production of the controlled substances in Group I of Annex C as referred to in paragraph 2.
5. Each Party shall ensure that for the twelve-month period commencing on 1 January 2015, and in each twelve-month period thereafter, its calculated level of consumption of the controlled substances in Group I of Annex C does not exceed, annually, ten per cent of the sum referred to in paragraph 1 of this Article. Each Party producing one or more of these substances shall, for the same periods, ensure that its calculated level of production of the controlled substances in Group I of Annex C does not exceed, annually, ten per cent of the calculated level referred to in paragraph 2 of this Article. However, in order to satisfy the basic domestic needs of the Parties operating under paragraph 1 of Article 5, its calculated level of production may exceed that limit by up to ten per cent of its calculated level of production of the controlled substances in Group I of Annex C as referred to in paragraph 2.
6. Each Party shall ensure that for the twelve-month period commencing on 1 January 2020, and in each twelve-month period thereafter, its calculated level of consumption of the controlled substances in Group I of Annex C does not exceed zero. Each Party producing one or more of these substances shall, for the same periods, ensure that its calculated level of production of the controlled substances in Group I of Annex C does not exceed zero. However:
- a. each Party may exceed that limit on consumption by up to zero point five per cent of the sum referred to in paragraph 1 of this Article in any such twelve-month period ending before 1 January 2030, provided that such consumption shall be restricted to the servicing of refrigeration and air conditioning equipment existing on 1 January 2020;
  - b. each Party may exceed that limit on production by up to zero point five per cent of the average referred to in paragraph 2 of this Article in any such twelve-month period ending before 1 January 2030, provided that such production shall be restricted to the servicing of refrigeration and air conditioning equipment existing on 1 January 2020.”

Parties would consider “further reduction of production for basic domestic needs” in 2020 and beyond. Paragraph 3 of Decision XIX/6 contains the accelerated phaseout schedule, allowing consumption and production up to 0.5 percent of baseline from 2020-2030 for servicing needs only. Under paragraph 13 of Decision XIX/6, the Parties will review in 2015 and 2025, respectively, the need for the “servicing tails” for Article 5 and non-Article 5 countries. The term “servicing tail” refers to an amount of HCFCs used to service existing equipment, such as certain types of air-conditioning and refrigeration appliances.

*B. How Do the Clean Air Act and EPA Regulations Phase Out HCFCs?*

The Clean Air Act schedules for the phase out of HCFC production and consumption, and for the restriction of HCFC use, appear in Section 605. The EPA has used its authority under Section 606 to accelerate those schedules. EPA regulations that apply to production and consumption of HCFCs are designed to enable the United States to meet the phaseout schedule under the Montreal Protocol.

The United States has chosen to implement the Montreal Protocol phaseout schedule on a chemical-by-chemical basis. In 1992, environmental and industry groups petitioned EPA to implement the required phaseout by eliminating the most ozone-depleting HCFCs first. Based on data available at that time, EPA believed the United States could meet, and possibly exceed, the required Montreal Protocol reductions through a chemical-by-chemical phaseout that employed a “worst-first” approach. In 1993, as authorized by section 606 of the CAA, EPA established a phaseout schedule that eliminated HCFC-141b first and would greatly restrict HCFC-142b and HCFC-22 next, followed by restrictions on all other HCFCs and ultimately a complete phaseout (58 FR 15014, March 18, 1993 and 58 FR 65018, December 10, 1993).

On January 21, 2003, EPA promulgated regulations (68 FR 2820, January 21, 2003, subsequently referred to in this document as the 2003 Final Rule) to ensure compliance with the first reduction milestone in the HCFC phaseout: the requirement that by January 1, 2004, the United States reduce HCFC consumption to 65 percent of baseline and freeze HCFC production. In the 2003 Final Rule, EPA established chemical-specific consumption and production baselines for HCFC-141b, HCFC-22, and HCFC-142b for the initial regulatory period ending December 31, 2009. Section 601(2) states that EPA may select “a representative calendar year” to serve as the company baseline for HCFCs. In the 2003 Final Rule, EPA concluded that because the entities eligible for allowances had differing production and import histories, no single year was representative for all companies. Therefore, EPA assigned an individual consumption baseline year to each company by selecting its highest ODP-weighted consumption year from 1994 through 1997. EPA assigned individual production baseline years in the same manner. EPA also provided for new entrants that began importing after the end of 1997 but before April 5, 1999, the date the advanced notice of proposed rulemaking was published. EPA took this action to ensure that small businesses that might not have been aware of the impending rulemaking would be able to continue in the HCFC market.

In the United States, an allowance is the unit of measure that controls production and consumption of ODS. EPA allocates calendar-year allowances equal to a percentage of the baseline—they are valid from January 1 to December 31 of that control period. A calendar-year allowance represents the privilege granted to a company to produce or import one kilogram (not ODP-weighted) of the specific substance. “Production allowance” and “consumption allowance” are defined at section 82.3. To produce an HCFC for which allowances have been allocated, an allowance holder must expend both production and consumption allowances. To import an

HCFC for which allowances have been allocated, an allowance holder must expend consumption allowances. An allowance holder exporting HCFCs for which it has expended consumption allowances may request a refund of those consumption allowances by submitting proper documentation and receiving approval from EPA.

The 2003 Final Rule set production and consumption baselines for the 2003-2009 regulatory period, using each company's highest "production year" or "consumption year". It completely phased out the production and import of HCFC-141b by granting zero percent of baseline for production and consumption in the table at 40 CFR 82.16. EPA did, however, create a petition process to allow applicants to request small amounts of HCFC-141b beyond the phaseout. The 2003 Final Rule allocated allowances for production and consumption of HCFC-22 and HCFC-142b for each of the years 2003 through 2009. EPA was able to allocate allowances for HCFC-22 and HCFC-142b at 100 percent of baseline because, in light of the concurrent complete phaseout of HCFC-141b, the allocations for HCFC-22 and HCFC-142b, combined with projections for consumption of all other HCFCs, remained below the 2004 cap of 65 percent of the United States baseline.

Since EPA is implementing the phaseout on a chemical-by-chemical basis, it allocates and tracks production and consumption allowances on an absolute kilogram basis for each chemical. Upon EPA approval, an allowance holder may transfer calendar-year allowances of one type of HCFC for calendar-year allowances of another type of HCFC, with transactions weighted according to the ODP of the chemicals involved. Pursuant to section 607 of the CAA, EPA applies an offset to each HCFC transfer by deducting 0.1 percent from the transferor's allowance balance. The offset benefits the ozone layer since it "results in greater total reductions

in the production in each year of . . . class II substances than would occur in that year in the absence of such transactions” (42 U.S.C. 7671f).

The United States remained comfortably below the aggregate HCFC cap through 2009. The 2003 Final Rule announced that EPA would allocate allowances for 2010-2014 in a subsequent action and that those allowances would be lower in aggregate than for 2003-2009, consistent with the next stepwise reduction for HCFCs under the Montreal Protocol. EPA subsequently monitored the market to estimate servicing needs and market adjustments in the use of HCFCs, including HCFCs for which EPA did not establish baselines in the 2003 Final Rule. In the 2009 Final Rule (74 FR 66412, December 15, 2009), EPA issued production and import allowances for HCFC-22, HCFC-142b and other HCFCs not previously included in the allowance system, for the 2010-2014 control periods.

In the 2009 Final Rule, EPA determined both the estimated need for HCFC-22 during the 2010-2014 regulatory period and the percentage of that estimated need for which it was appropriate to allocate allowances. EPA decided that the percentage of the estimated need allocated in the form of allowances should not remain constant from year to year, but rather should decline on an annual basis. For 2010, EPA allocated HCFC-22 allowances equal to 80 percent of the estimated need, concluding that reused, recycled, and reclaimed material could meet the remaining 20 percent. The percentage of estimated need for which there was no allocation, and that would therefore need to be met through recycling and reclamation, rose from 20 percent in 2010 to 29 percent in 2014. The intent of this approach was to foster reclamation, and to ensure that the United States could meet the 2015 stepdown under the Montreal Protocol.

However, part of the 2009 Final Rule was vacated in an August 27, 2010 decision issued by the United States Court of Appeals for the District of Columbia Circuit (Court) in *Arkema v.*

*EPA* (618 F.3d 1, D.C. Cir. 2010). Certain allowance holders affected by the 2009 Final Rule filed petitions for judicial review of the rule under section 307(b) of the Clean Air Act. Among other arguments, the petitioners contended that the rule was impermissibly retroactive because in setting the baselines for the new regulatory period, EPA did not take into account certain inter-pollutant baseline transfers that petitioners had performed during the prior regulatory period. Accounting for these transfers in the 2009 Final Rule and applying the same methodology would have resulted in different baselines and calendar-year allowances for HCFC-22 and HCFC-142b.

The Court agreed with petitioners that “the [2009] Final Rule unacceptably alters transactions the EPA approved under the 2003 Rule,” (*Arkema v. EPA*, 618 F.3d at 3). The Court vacated the rule in part, “insofar as it operates retroactively,” and remanded to EPA “for prompt resolution,” (618 F.3d at 10). EPA’s petition for rehearing was denied on January 21, 2011. EPA addressed the Court’s partial vacatur as it related to 2011 in an August 5, 2011 interim final rule, “Protection of Stratospheric Ozone: Adjustments to the Allowance System for Controlling HCFC Production, Import, and Export,” (76 FR 47451, August 5, 2011, 2011 Interim Final Rule). In that rule, EPA established new baselines that (1) credited the 2008 inter-pollutant trades at issue in *Arkema v. EPA* based on the Court’s decision, (2) reflected inter-company, single-pollutant baseline transfers that occurred since the 2009 Final Rule was signed, (3) allocated HCFC-22 and HCFC-142b allowances for 2011, (4) clarified EPA’s policy on all future inter-pollutant transfers and (5) updated company names. The HCFC-22 and HCFC-142b use restrictions and the allocation for other controlled HCFCs were not affected by the partial vacatur.

To complete its response to the court’s decision, EPA published a final rule with the same name on April 3, 2013, allocating HCFC-142b and HCFC-22 allowances for 2012-2014 (78 FR

20004, 2013 Final Rule). In that rule, EPA reduced HCFC-22 allowances in 2012-2014 by almost 30 percent relative to the 2009 Final Rule in order to incentivize proper handling and recovery of HCFC-22 and encourage transition to non-ODS alternatives.

EPA has not yet allocated any HCFC allowances for year 2015 or beyond. The regulations at 40 CFR 82.15(a) and (b) prohibit the production and import of HCFCs for which EPA has apportioned baseline allowances without calendar-year (or “annual”) allowances. As a result, production and import of HCFC-22 and HCFC-142b, as well as HCFC-123, HCFC-124 and HCFC-225ca/cb is prohibited in 2015 and beyond under current regulations, pending the allocation of allowances. This proposed rule initiates the rulemaking process for setting the 2015-2019 HCFC allocations.

For more information on the history of the HCFC phaseout and applicable rulemakings, see: <http://www.epa.gov/ozone/title6/phaseout/class2.html>.

*C. What Sections of the Clean Air Act Apply to This Rulemaking?*

Several sections of the CAA apply to this rulemaking. Section 602 states that EPA shall publish an initial list of class II substances, which is to include the HCFCs specified in the statute as well as their isomers. EPA’s listing of class II substances appears at appendix B to 40 CFR part 82, subpart A.

Section 605 of the CAA phases out production and consumption and restricts the use of HCFCs in accordance with the schedule set forth in that section. As discussed in the 2009 Final Rule (74 FR 66416), section 606 provides EPA authority to set a more stringent phaseout schedule than the schedule in section 605 based on an EPA determination regarding current scientific information or the availability of substitutes, or to conform to any acceleration under the Montreal Protocol. EPA previously set a more stringent schedule than the section 605

schedule through a rule published December 10, 1993 (58 FR 65018). Through the 2009 Final Rule, EPA made a further adjustment to the section 605 schedule based on the acceleration under the Montreal Protocol as agreed to at the Meeting of the Parties in September 2007. The more stringent schedule established in that rule is still in effect.

Section 606 provides authority for EPA to promulgate regulations that establish a schedule for production and consumption that is more stringent than what is set forth in section 605 if: “(1) based on an assessment of credible current scientific information (including any assessment under the Montreal Protocol) regarding harmful effects on the stratospheric ozone layer associated with a class I or class II substance, the Administrator determines that such more stringent schedule may be necessary to protect human health and the environment against such effects, (2) based on the availability of substitutes for listed substances, the Administrator determines that such more stringent schedule is practicable, taking into account technological achievability, safety, and other relevant factors, or (3) the Montreal Protocol is modified to include a schedule to control or reduce production, consumption, or use of any substance more rapidly than the applicable schedule under this title.” It is only necessary to meet one of the three criteria. In the 2009 Final Rule, EPA determined that all three criteria had been met with respect to the schedule for phasing out production and consumption of HCFC-22 and HCFC-142b<sup>4</sup>.

Section 608 of the CAA, titled National Recycling and Emission Reduction Program, requires EPA to establish standards and requirements for the use and disposal of class I and II substances. Those requirements must reduce the use and emissions of controlled substances to the lowest achievable level, as well as maximize their recapture and recycling. Additionally, section 608(c) prohibits any person maintaining, servicing, repairing or disposing of an appliance

---

<sup>4</sup> The phaseout schedule for HCFC-22 and HCFC-142b was unaffected by the decision in *Arkema v. EPA*.

that contains refrigerant from knowingly venting, releasing, or disposing of that substance to the environment, regardless of whether the refrigerant is an ODS or a substitute. Substitutes are exempted from this prohibition only if EPA has determined that venting, releasing, or disposing of the substitute does not pose a threat to the environment.

Section 611 of the CAA requires EPA to establish and implement labeling requirements for containers of, and products containing or manufactured with class I or class II ODS. While containers of class II substances (i.e. HCFCs) already are subject to labeling requirements, products containing or manufactured with class II substances must be labeled beginning January 1, 2015. The specific requirements and existing regulation implementing those requirements are discussed in the following section.

Finally, Section 614 of the CAA describes the relationship of Title VI to the Montreal Protocol. Section 614(b) states: “In the case of conflict between any provision of this title and any provision of the Montreal Protocol, the more stringent provision shall govern.” Section 614 ensures that EPA regulations are in accordance with United States obligations under the Montreal Protocol.

### **III. Clean Air Act Requirements that Begin in 2015**

#### *A. Labeling Requirements in Section 611(c) and (d)*

Section 611 of the CAA requires EPA to establish and implement labeling requirements for containers of, and products containing or manufactured with class I or class II ODS. In 1993, EPA published regulations on these labeling requirements (58 FR 8136, February 11, 1993), codified at 40 CFR part 82 subpart E. Currently, these requirements only apply to containers containing class I or II ODS and products containing or manufactured with class I ODS. Products containing or manufactured with class II substances will be subject to these requirements

beginning on January 1, 2015. As a result, in 2015, containers containing, products containing, and products manufactured with a class I *or* class II substance must bear a product label stating: “Warning: Contains [or Manufactured with, if applicable] [insert name of class I or II substance], a substance which harms public health and environment by destroying ozone in the upper atmosphere” (40 CFR 82.106).

EPA defines a “product containing” a class II substance as a “product including, but not limited to, containers, vessels, or pieces of equipment, that physically holds a controlled substance at the point of sale to the ultimate consumer which remains within the product,” (40 CFR 82.104). Two examples of a “product containing” a class II substance that would require a label are (1) portable fire extinguishers containing an HCFC and (2) appliances that incorporate closed-cell foam blown with an HCFC. Foams are plastics (such as polyurethane or polystyrene) that are manufactured using blowing agents to create bubbles or cells in the material's structure. Closed-cell foam physically holds blowing agent within the cells. While HCFCs are no longer used as blowing agents in the United States, they are used in other countries from which the United States may import products. In the case of portable fire extinguishers, the fire suppression agent is contained in a reservoir within the extinguisher and released by the user when needed.

On the other hand, the definition of a product “manufactured with” a class II substance is a product for which the manufacturer used a class II substance directly in that product’s manufacturing, but where the product itself does not contain more than trace quantities of the ODS at the point of introduction into interstate commerce. A product “manufactured with” a class II substance would include electronics cleaned with HCFC solvent and open cell foam blown with an HCFC. Open cell foam is different from closed cell foam in that it was manufactured with a blowing agent, but no longer contains the blowing agent because the cells

or bubbles in open cell foam are open to the surrounding environment. Since HCFCs are no longer used as foam blowing agents in the United States, and the Nonessential Products Ban prohibits the sale or distribution of open cell plastic foam products made with HCFCs (40 CFR 82.70(c)), EPA expects the requirement for a “manufactured with” label should not be relevant to most open cell foam products. The agency welcomes comment on which open or closed cell foam products are currently being imported, and whether those products are likely blown with an HCFC. EPA would like this information so it can communicate with and offer guidance to companies that must determine whether the HCFC labeling requirements apply to their products. Final products that incorporate another product that was “manufactured with” a class I or class II ODS do not have to bear a label so long as the manufacturer of the final product is distinct from the manufacturer of the product “manufactured with” the ODS (40 CFR 82.116). By contrast, final products that incorporate “products containing” a class I or II ODS will require a warning label, even if the final product manufacturer purchases the “product containing” the ODS from another manufacturer or supplier (40 CFR 82.114). For a discussion of the labeling pass-through requirements, see the February 11, 1993 final rule that implemented the statutory labeling requirements (58 FR 8136).

EPA has created a preliminary list of products that might be affected by these requirements beginning in 2015. This list, along with guidance for manufacturers and importers of potentially affected products, is titled *Summary of HCFC Product Labeling Requirements & Potentially Affected Products* (Labeling Memo) and can be found in the docket for this rulemaking. EPA is seeking comment on whether this list is accurate and complete, and would like to know where products made with or containing HCFCs are manufactured. This

information will help the agency better inform manufacturers in the United States and abroad about the labeling requirement taking effect in 2015.

The agency is also interested in comments on which products have mainly switched to non-ODS alternatives so it can assist companies in determining whether the labeling requirements are likely to apply to their products. For products that no longer are manufactured with or contain HCFCs, the agency would like to know if that change applies globally, or only to manufacture in the United States. The agency also welcomes comment on whether any clarification to the regulations at 40 CFR subpart E (82.100-82.124) is needed in order to implement the existing labeling requirement for products containing or manufactured with class II substances. More background on the labeling requirements can be found in the 1993 Final Rule (58 FR 8136), which is also included in the docket to this rulemaking.

EPA is not proposing any substantive changes to the regulations at 40 CFR subpart E; however, the agency is proposing three very minor modifications to clarify the intent of the regulatory language with respect to class II substances. The first two proposed clarifications are to replace “class I substance” with “controlled substance.” While the emphasis in 1993 was on class I substances, EPA is now proposing to remove any ambiguity with respect to class II substances by reconciling inconsistent terminology, specifically at 82.110(c) and 82.112(d). The *Combined statement for multiple class I substances* at 82.110(c) states, “If a container containing or a product contains or is manufactured with, more than one class I or class II substance, the warning statement may include the names of all of the substances in a single warning statement, provided that the combined statement clearly distinguishes which substances the container or product contains and which were used in the manufacturing process.” This paragraph clearly applies to both class I and class II products, as stated in the operative text. EPA is proposing to

modify the title of this paragraph to be *Combined statement for multiple controlled substances*, consistent with the operative text. Similarly, 82.112(d), which is titled: *Manufacturers, distributors, wholesalers, retailers that sell spare parts manufactured with controlled substances solely for repair*, includes the more general term “controlled substances” in the title, but not the operative text. The operative text that follows the title reads: “Manufacturers, distributors, wholesalers, and retailers that purchase spare parts manufactured with a class I substance from another manufacturer or supplier, and sell such spare parts for the sole purpose of repair, are not required to pass through an applicable warning label if such products are removed from the original packaging provided by the manufacturer from whom the products are purchased...” EPA is proposing to replace “class I substance” with “controlled substance” in order to clarify that this narrow exemption to the labeling requirements also applies to class II products in the same way it applied to class I products.

The final minor change that EPA is proposing is at 82.122, *Certification, recordkeeping, and notice requirements*. The first sentence at (a)(1) refers to persons claiming the exemption for certain methyl chloroform users provided for in 82.106(b)(2); however, this exemption is actually provided for in 82.106(b)(4). EPA is proposing to revise the current text to reference the correct paragraph, which is 82.106(b)(4) not (b)(2). EPA also notes that this exemption ended May 15, 1994 and that the agency is proposing this minor change solely to avoid confusion.

*B. Use and Sales Restriction in Section 605(a)*

Starting January 1, 2015, section 605(a) of the Clean Air Act prohibits the use or introduction into interstate commerce of any class II substance that does not meet one of four exceptions. Specifically, use or introduction into interstate commerce is allowed only if (1) the substance has been used, recovered and recycled; (2) it is entirely transformed, except for trace

quantities, in the production of other chemicals; (3) it is used as a refrigerant in appliances manufactured prior to 2020; or (4) it is listed as acceptable for use as a nonresidential fire suppression agent in accordance with CAA section 612(c).<sup>5</sup> Section 612 is the statutory authority for EPA's Significant New Alternatives Policy program, under which the agency reviews potential substitutes for class I and class II substances in certain end uses and lists those potential substitutes as acceptable, acceptable subject to use conditions, acceptable subject to narrowed use limits, or unacceptable (see 40 CFR subpart G).

In the 2009 Final Rule (74 FR 66412), EPA used its authority under section 606 to accelerate the section 605(a) restrictions on use and introduction into interstate commerce for HCFC-22 and HCFC-142b, applying them to HCFC-22 and HCFC-142b<sup>6</sup> as of January 1, 2010, five years earlier than the date specified in section 605(a). Effective January 1, 2010, EPA prohibited the use of virgin HCFC-22 and HCFC-142b to manufacture or service new air-conditioning and refrigeration appliances. In a separate rule, under the authority provided in section 615 of the CAA, EPA also prohibited the sale and distribution of appliances and appliance components pre-charged with virgin or used, recovered and recycled HCFC-22 and HCFC-142b (74 FR 66450). For all other HCFCs, including those for which EPA has not historically issued allowances, the section 605(a) prohibitions and exceptions apply as of January 1, 2015. All HCFCs other than HCFC-22 and HCFC-142b may continue to be used and sold as *refrigerants*, but only for use in appliances manufactured before 2020.

---

<sup>5</sup> The fourth exception in this list is a recent change to the Clean Air Act, which was included in the National Defense Authorization Act for Fiscal Year 2012 [112th Congress, H.R. 1540, Title III, Section 320, *Fire Suppression Agents*]. EPA is proposing to incorporate this change into the regulations at 40 CFR 82.15(g)(4) and 82.16(d). See Section III.B.2. of this preamble for further discussion.

<sup>6</sup> EPA also accelerated the restrictions on use and introduction into interstate commerce for HCFC-141b in the same rulemaking; however, HCFC-141b is not discussed further in this section because it is not used for refrigeration purposes.

EPA believes the term “use” is ambiguous in the context of section 605(a) with respect to potential categories of use that Congress did not directly address. Historically, in the context of section 605, EPA has focused on use of refrigerants to manufacture and service appliances and the section 605(a)(3) exception for servicing existing equipment. In 1993, EPA took the section 605(a) use restrictions into account in establishing the HCFC chemical-by-chemical phaseout. The 1993 Notice of Proposed Rulemaking (58 FR 15014) discusses the acceleration of the use restriction for HCFC-22 and HCFC-142b from the standpoint of when it would be technologically feasible to cease using these two chemicals in new refrigeration and air-conditioning equipment. In that rulemaking, EPA did not explore how to interpret or apply the term “use” in other circumstances. EPA considered various interpretations of that term in developing the 2009 Final Rule but again focused on refrigerants. In the 2008 Notice of Proposed Rulemaking (73 FR 78680, December 23, 2008), EPA noted that the three statutory exceptions that existed at that time “inform EPA’s understanding of the term ‘use’” (73 FR 78698). The preamble to the 2009 Final Rule states: “With regard to HCFCs used as refrigerants, EPA interprets the term ‘use’ to mean initially charging as well as maintaining and servicing refrigeration equipment” (74 FR 66437). In regard to non-refrigerant uses, EPA addressed two manufacturing uses of HCFC-22 (manufacture of sterilant blends for medical equipment and manufacture of thermostatic expansion valves); EPA also concluded that section 605(a) would ban the primary pre-2010 use of HCFC-142b (foam-blowing). At that time, however, EPA was not yet implementing section 605(a) with respect to other HCFCs and did not fully explore what “use” might mean in the context of non-refrigerants.

In the development of the 2009 Final Rule, EPA did consider whether section 605(a) applies to the operation of products containing HCFCs. With regard to refrigeration equipment,

EPA concluded: “the section 605(a) ‘use’ ban does not apply to a consumer’s operation of equipment containing HCFCs” (74 FR 66438). The agency’s conclusion was partially based on the third exemption to 605(a), for class II substances that are used as refrigerants in appliances manufactured before a specified date. This exemption indicated “that Congress intended to permit the continued use of previously manufactured appliances.” EPA also stated that for “products containing HCFCs for non-refrigerant uses . . . EPA interprets the term ‘use’ as relating to the manufacture (and where applicable, the service) of those products, not the utilization of those products in the hands of the end user” (74 FR 66437).

EPA is not revisiting its interpretation of section 605(a) with respect to how it interprets “use” for products containing HCFCs. For purposes of implementing the 2015 use restriction in section 605(a), “use” of a controlled substance would include manufacture of products that contain or are made with HCFCs; however, it would not include use of existing products containing HCFCs (i.e., for substances other than HCFC-22 and HCFC-142b, products manufactured before January 1, 2015). The reasons for this conclusion are explained in the preamble to the 2009 Final Rule. As made clear in that notice, EPA interprets section 605(a) as prohibiting the use of *substances*, not the use of products. The statutory language does not directly address whether use of a product containing controlled substances might constitute a prohibited use of the substance. However, consistent with its earlier statements, EPA does not intend to treat use of a product containing HCFCs as use of the HCFC. The agency has a long history of distinguishing between products and substances in its ODS phaseout regulations. Controlled substances are defined in 40 CFR part 82 subpart A as listed substances “whether existing alone or in a mixture, but excluding any such substance or mixture that is in a manufactured product other than a container used for the transportation or storage of the

substance or mixture.” EPA distinguishes between bulk containers of HCFCs and products containing HCFCs. The subpart A definition of controlled substance clarifies that if a substance needs to be transferred from a bulk container to a piece of equipment or another container to realize its intended use, it will be treated as a “substance.” Examples of bulk containers include jugs, drums, and cylinders.

EPA refers readers to the preamble of the 2009 Final Rule for two other clarifications on how EPA interprets the term “use” in the context of section 605(a). First, the agency provided the following clarification on how the Nonessential Products Ban (CAA section 610) and the HCFC use restriction (CAA section 605(a)) should be interpreted together: “By prohibiting use and introduction into interstate commerce of HCFCs as bulk substances, section 605(a) effectively prohibits the continued manufacture of any products containing HCFCs (which qualifies as a type of ‘use’) unless specifically exempted in that section.” EPA explained that while the section 610(a) Nonessential Products Ban exempts certain products, these exempted products may not be manufactured after 2014 due to the HCFC use restrictions in section 605(a). EPA clarified that “such products are prohibited from continued manufacture, unless manufactured with recovered HCFCs” (74 FR 66439). Second, in the preamble to the 2009 Final Rule the agency clarified that “EPA does not interpret ‘use’ [in the context of section 605] to include destruction, recovery for disposal, discharge consistent with all other regulatory requirements, or other similar actions where the substance is part of a disposal chain” (74 FR 66439).

Because the use prohibition will apply to a variety of sectors and circumstances beginning in 2015, EPA believes it may be helpful to define “use” in the phaseout regulations (40 CFR part 82 subpart A). There is currently a definition of “use” in the regulations for the

Significant New Alternatives Policy (SNAP) Program (40 CFR part 82 subpart G), which reads as follows: “Use means any use of a substitute for a Class I or Class II ozone-depleting compound, including but not limited to use in a manufacturing process or product, in consumption by the end user, or in intermediate uses, such as formulation or packaging for other subsequent uses” (40 CFR 82.172). In this rulemaking, the agency is proposing a related, but somewhat different definition for purposes of the section 605(a) use prohibition, which is implemented at 40 CFR 82.15: “Use of a class II controlled substance, for the purposes of section 82.15 of this subpart, includes but is not limited to use in a manufacturing process, use in manufacturing a product, intermediate uses such as formulation or packaging for other subsequent uses, and use in maintaining, servicing, or repairing an appliance or other piece of equipment. Use of a class II controlled substance also includes use of that controlled substance when it is removed from a container used for the transportation or storage of the substance but does not include use of a manufactured product containing a controlled substance.” The primary difference between this proposed definition under section 605(a) and the SNAP definition is that the SNAP definition includes use by the consumer of a product containing ODS. This difference reflects EPA’s interpretation of the section 605(a) use restriction as set forth in the preamble to the 2009 Final Rule.

EPA welcomes comment on its proposed section 605(a) definition of “use” of a class II controlled substance, particularly with regard to how such a definition can help clarify the distinction between use of a controlled substance and use of a product. Please note that the language regarding that distinction in the last line of the proposed definition is based on the existing definition of controlled substance in 40 CFR 82.3. If finalized, the definition of use of a

class II controlled substance would appear at 40 CFR 82.3, which is the Definitions section of subpart A.

The section 605(a) restrictions on use and introduction into interstate commerce apply to all class II controlled substances. As explained in section V.H. of this preamble, the agency is proposing to revise the list of class II controlled substances in 40 CFR part 82 subpart A, appendix B to include all isomers of listed substances, consistent with section 602 of the CAA and the Montreal Protocol listing of HCFCs (found in Group I to Annex C of the Protocol).

*1. What Is EPA Proposing for Existing Inventory of HCFC-225ca and HCFC-225cb?*

Numerous stakeholders have asked what they will be able to do with inventory of HCFC-225ca/cb that exists as of January 1, 2015. To EPA's knowledge, HCFC-225ca, HCFC-225cb and mixtures thereof are only used as solvents, primarily for precision cleaning in the aerospace and electronics industries. As explained above, the section 605(a) use ban does not apply to the use of products that contain class II controlled substances. However, some substances, including HCFC-225ca/cb, may be used directly in cleaning equipment or in manufacturing a product without first being put into a manufactured product themselves. For example, a person may take HCFC-225ca/cb from a bulk container and either add it to a vapor degreaser or pour it on a hand wipe to clean a piece of equipment or component. In those circumstances, the substance itself—not a product containing the substance—is being used. (This differs from use of products that contain HCFC-225ca/cb, such as aerosol cans or pre-soaked wipes). In general, EPA is proposing to interpret the section 605(a) use ban to apply to use when the substance is removed from a container used for transportation or storage.

However, EPA believes the use of HCFC-225ca/cb entered into inventory prior to January 1, 2015 by persons that use these substances as solvents may fairly be considered to be

de minimis. Thus, for reasons discussed below, the agency is proposing a de minimis exemption to the use prohibition in 605(a), which would allow any person with HCFC-225ca/cb in inventory prior to January 1, 2015 to use that material as a solvent for as long as needed<sup>7</sup>. “Person” is defined in 40 CFR 82.3 to include corporations and federal agencies, among other entities. EPA is not proposing an exemption to the prohibition on introduction into interstate commerce, nor is it proposing to change the existing regulatory phaseout date for production and import of HCFC-225ca/cb. The person holding the HCFC-225ca/cb in inventory would not be able to transfer or sell it to another person, nor would EPA issue any allowances to produce or import new HCFC-225ca/cb. Additionally, neither companies that manufacture products for their own use, nor companies that manufacture products for sale to others would be allowed to manufacture products containing virgin HCFC-225ca/cb, as that would constitute a prohibited use of the substance; however, a person would be able to sell any products containing HCFC-225ca/cb that had been manufactured and entered into initial inventory prior to January 1, 2015, since at that point they would be “products” and not “class II controlled substances.” A product is considered to be a part of “initial inventory” at the point where the original product has completed its manufacturing process and is ready for sale by the product manufacturer. For more discussion of EPA’s interpretation of the term “initial inventory,” see the 1993 Nonessential Products Ban at 58 FR 69661. Also, for purposes of section 605(a), manufacturers may continue to use HCFC-225ca/cb to make both products “manufactured with” and products “containing” HCFC-225ca/cb as of January 1, 2015, so long as the HCFC-225ca/cb has been used, recovered and recycled. Labeling requirements for these products manufactured with either virgin or used,

---

<sup>7</sup> Since the section 605(a) Clean Air Act prohibition only limits the use of virgin or unused HCFC-225ca/cb solvent, used, recovered and recycled solvent can still be used for precision cleaning and manufacturing products after January 1, 2015 regardless of EPA’s decision on the proposed exemption.

recovered and recycled HCFC-225ca/cb would apply beginning January 1, 2015 (see section III.A. of this preamble). Manufacturers should also ensure that they are in compliance with the Nonessential Products Ban and with SNAP regulations.

EPA believes it has implied authority to propose a de minimis exemption from the section 605(a) use restriction. The United States Court of Appeals for the District of Columbia Circuit has recognized that “[u]nless Congress has been extraordinarily rigid, there is likely a basis for an implication of de minimis authority to provide exemption when the burdens of regulation yield a gain of trivial or no value.” *Alabama Power Co. v. Costle*, 636 F.2d 323, 360-61 (D.C. Cir. 1980). In *Alabama Power*, the Court held that “[c]ategorical exemptions from statutory commands may...be permissible as an exercise of agency power, inherent in most statutory schemes, to overlook circumstances that in context may fairly be considered de minimis. It is commonplace, of course, that the law does not concern itself with trifling matters, and this principle has often found application in the administrative context. Courts should be reluctant to apply the literal terms of a statute to mandate pointless expenditures of effort.” *Id.* (internal citations omitted).

In an earlier case cited by the court in *Alabama Power*, the court described the doctrine as follows: “The ' de minimis ' doctrine that was developed to prevent trivial items from draining the time of the courts has room for sound application to administration by the Government of its regulatory programs. . . . The ability, which we describe here, to exempt de minimis situations from a statutory command is not an ability to depart from the statute, but rather a tool to be used in implementing the legislative design.” *District of Columbia v. Orleans*, 406 F.2d 957, 959 (1968).

In this respect, the *Alabama Power* opinion observed in a footnote that the de minimis principle "is a cousin of the doctrine that, notwithstanding the 'plain meaning' of a statute, a court must look beyond the words to the purpose of the act where its literal terms lead to 'absurd or futile results.'" *Id.* at 360 n. 89 (citations omitted). To apply an exclusion based on the de minimis doctrine, "the agency will bear the burden of making the required showing" that a matter is truly de minimis which naturally will turn on the assessment of particular circumstances. *Id.* The *Alabama Power* opinion concluded that "most regulatory statutes, including the CAA, permit such agency showings in appropriate cases." *Id.*

A notable limitation on the de minimis doctrine is that it does not authorize the agency to exclude something on the basis of a cost-benefit analysis. As the court explained, this "implied authority is not available for a situation where the regulatory function does provide benefits, in the sense of furthering the regulatory objectives, but the agency concludes that the acknowledged benefits are exceeded by the costs." *Id.* The court held that any "implied authority to make cost-benefit decisions must be based not on a general doctrine but on a fair reading of the specific statute, its aims and legislative history." *Id.*

Since *Chevron*, several courts have recognized de minimis exceptions (1) so long as they are not contrary to the express terms of the statute<sup>8</sup> and (2) the agency's interpretation of the exception is a permissible reading of the statute. See e.g., *Ober v. Whitman*, 243 F.3d 1190 (9th Cir. 2001); see also *Ohio v. EPA*, 997 F.2d 1520 (D.C. Cir. 1993).

---

<sup>8</sup> In *Sierra Club v. EPA*, 705 F.3d 458 (D.C. Cir. 2013), the D.C. Circuit held that EPA had no de minimis authority to create an exemption from the preconstruction monitoring requirement in § 165(e)(2) of the CAA. "Whether we call preconstruction monitoring a 'plain requirement' or a requirement mandated by an 'extraordinarily rigid' statute, the result is the same: the EPA has no *de minimis* authority to exempt the requirement." *Id.* at 468.

EPA believes a de minimis exemption is permissible in this situation for several reasons. First, section 605(a) is not extraordinarily rigid. Second, the use prohibition in section 605(a) is ambiguous with respect to potential categories of use that Congress did not directly address. Third, banning the use of HCFC solvent inventory held by the end user would not advance the statutory purpose. These arguments are discussed in more detail in the following paragraphs.

The purpose of Title VI of the Clean Air Act is, as its title suggests, “Stratospheric Ozone Protection.” Title VI can be summarized into three principal areas: the phaseout of production and import of ozone depleting substances (section 602-607); reduction in emissions of these substances via various means such as required servicing practices, restrictions on sale and distribution of products, and consumer education (section 608-611); and the transition to alternatives that do not harm the stratospheric ozone layer and that reduce overall risk to human health and the environment (section 612). Section 605 specifically addresses the “Phase-out of production and consumption of class II controlled substances.” Section 604 applies to the “Phase-out of production and consumption of class I substances.” There are notable differences between the two phaseouts. The phaseout under section 604 operates much quicker than the phaseout under section 605. In addition, the section 604 phaseout operates much earlier than the section 605 phaseout. Section 604 required the first reductions in class I substances in 1992, followed by a series of stepdowns culminating in the complete phaseout of nearly all class I substances by 2000. For class II substances, section 605 freezes production and consumption in 2015, with the complete phaseout not occurring until 2030.<sup>9</sup> Two principal factors drive the distinction in phaseout schedules; class I substances have much higher ODPs relative to class II

---

<sup>9</sup> Through rulemakings, EPA accelerated the statutory deadlines in section 604 and 605, in accordance with the requirements in section 606. See 57 FR 3354 and 58 FR 65013.

substances,<sup>10</sup> and class II substances were recognized as important transitional chemicals, beneficial in phasing out class I substances as quickly as possible. During the development of the 1990 Clean Air Act Amendments, Congress heard testimony on the need to phase out HCFCs as well as class I substances. Senator Chaffee acknowledged that “one difficulty, however, is the fact that achieving the goal of eliminating the potent long-lived CFCs as rapidly as possible is, to some extent, dependent on the continued availability of HCFCs as intermediate substitutes pending development of other, safe, non-ozone depleting substances or processes.” (A Legislative History of the Clean Air Act Amendments of 1990, volume 1, p. 5210 (Senate debate)).

It is clear that Congress’ intent was to phase out production and import of class I substances “as rapidly as possible,” and certainly more rapidly than class II substances given the difference in the start and duration of the two phaseout schedules; however, nowhere in section 604 does Congress restrict the *use* of class I substances. Instead, Congress phases out the *production* and *import* for domestic use, and allows for certain exemptions to the phaseout for specific uses (see, e.g., section 604 (f) and (g).) Given the comparable titles of sections 604 and 605 and the overarching goal of phasing out both class I and class II ODS<sup>11</sup>, Congress likely intended that the “use” restriction, which is unique to section 605, should be interpreted in a manner that furthers the phaseout of production and import of HCFCs while recognizing the role of HCFCs as transitional substances.

Congress’ overall approach to the class II phaseout is generally less rigid than its approach to the class I phaseout, given the longer timeframes and the presence of only one

---

<sup>10</sup> For example, all CFCs have an ODP of 0.6 or greater, with most having an ODP of 1.0, whereas the HCFC with the highest ODP is HCFC-141b, which has an ODP of 0.11.

<sup>11</sup> “The centerpiece of the stratospheric ozone protection program established by this title is the phaseout of production and consumption of all ozone depleting substances.” Clean Air Act Amendments—Conference Report (Senate - October 27, 1990) (136 Cong. Rec. S16946).

intermediate reduction step (see section 605(b)). Given this context, EPA is not inclined to view section 605(a) as “extraordinarily rigid.” In addition, section 605(a) provides an explicit exception for class II substances that have been “used, recovered, and recycled.” Thus, Congress clearly did not envision that all HCFC use in applications not specifically exempted come to a halt by 2015. Indeed, end users of HCFC-225ca/cb could avail themselves of this exception by putting their entire existing inventory of HCFC-225ca/cb into their equipment before January 1, 2015. For example, an end user could use its entire inventory of virgin HCFC-225ca/cb in its vapor degreaser, recover the HCFC-225ca/cb from the degreaser, and then recycle it for reuse in 2015 and beyond. In other instances, an end user could take virgin HCFC-225ca/cb, apply it to a surface via the typical application method such that the surface is cleaned as intended, at which point any recovered HCFC-225ca/cb would be rendered “used”. EPA does not wish to encourage this approach to meeting §605(a) requirements, which would do nothing to advance the statutory purpose. Rather than insist on an inflexible reading of the statute that may create “absurd or futile results,” EPA believes the better option is to allow end users to continue to use virgin inventory that they hold prior to 2015.

EPA views Section 605(a) as ambiguous with respect to potential categories of use that Congress did not explicitly address. Section 605(a) explicitly addresses refrigerant uses of HCFCs but is silent with respect to solvents. At the time the 1990 Clean Air Act Amendments were written, HCFCs were used predominantly as refrigerants and much consideration was given to this use in the legislative history. HCFC solvent uses, on the other hand, were not considered by Congress in the context of the class II phaseout, because they did not exist. At that time, two class I substances, CFC-113 and methyl chloroform, were used as solvents. Far from expecting an early transition, Congress allowed production and import of methyl chloroform until 2002,

two years after the phaseout date for most class I substances. In addition, in 604(d)(1), Congress specifically allowed for limited exemptions to the production and import phaseout for methyl chloroform for “use in essential applications.” It was not until 1995 that HCFC-225ca/cb was listed under SNAP as acceptable subject to use conditions in electronics cleaning and precision cleaning (see 60 FR 31092, June 13, 1995). HCFC-225ca/cb was listed as acceptable in metals cleaning as recently as 2002 (see 67 FR 77927, December 20, 2002). In all three of these end uses, HCFC-225ca/cb, which has an ODP of 0.025/0.033, is a substitute for CFC-113 and methyl chloroform, which have ODPs of 0.8 and 0.1, respectively. While HCFC-225ca/cb solvents have acted since 1995 as transitional substances between class I ODS and non-ODS substitutes for certain niche needs, there is no evidence that Congress anticipated in 1990 that any HCFCs would be used as solvents. Thus, Congress did not have the opportunity to consider whether to apply the section 605(a) use restriction to HCFC-225ca/cb solvents.

EPA does not believe that prohibiting persons that use HCFC-225ca/cb as a solvent to clean their equipment or to clean components of products they manufacture—resulting in products “manufactured with” these HCFCs—from using their existing inventory of HCFC-225ca/cb would advance the goals of Title VI. As discussed above, any person could avoid such a prohibition by rendering all their inventory “used” in advance of the effective date. From the perspective of potential ozone destruction, there is little or no difference in this instance whether the person uses such de minimis quantities already on site at the end of 2014 or after January 1, 2015.

EPA believes a de minimis exemption is appropriate for the reasons provided, and also because the quantities involved are extremely limited. This is a small niche use and EPA is only proposing to exempt HCFC-225ca/cb held in inventory by persons that use these substances as a

solvent. The quantities produced or imported using allowances act as a ceiling on the quantities that can comprise pre-2015 inventory, and the annual allocation of allowances for HCFC-225ca/cb from 2010-2014 is only 20.7 ODP-weighted MT. Recent HCFC-225ca/cb consumption has been substantially less than the allocation, further decreasing the absolute maximum amount that could remain in inventories as of 2015.

EPA also considered its past use of de minimis authority under Title VI of the Clean Air Act; in fact, the agency is modeling this proposed exemption to 605(a) on the de minimis exemption to the nonessential products ban for class II substances (CAA section 610(c) and (d)). In the 1993 Nonessential Products Rule, EPA proposed and finalized an exemption to the ban on sale and distribution in interstate commerce of products manufactured with or containing HCFCs. The ban applied to products that were placed in initial inventory by December 27, 1993—90 days after the proposed rule published and four days prior to the statutory ban on sale and distribution (58 FR 50464, September 27, 1993 and 58 FR 69638, December 30, 1993). EPA finalized this narrow “grandfather” exception for existing inventories based on the de minimis rationale: “The crux of EPA’s reasoning for providing any exemption for existing inventories was that emissions from products already in existence were de minimis” (58 FR 69660). EPA believes that emissions from existing inventories of HCFC-225ca/cb would also be de minimis.

As discussed, EPA believes it has sufficient authority to propose a de minimis exemption to the section 605(a) use prohibition for use of HCFC-225ca/cb held in inventory by persons using these substances as solvents. In addition to evaluating its legal authority, EPA has also considered policy aspects of proposing an exemption. In the 1993 Nonessential Products Rule, EPA identified various policy reasons for exempting existing inventory. One policy goal was to relieve a potentially onerous burden on small businesses because, absent a sell through provision,

existing inventories would otherwise have to be liquidated (or in the case of the section 605(a) use restriction, intentionally used, recovered and recycled prior to the effective date of the prohibition). EPA recognizes the potential inefficiency of a company rendering all of their HCFC-225ca/cb inventory used in advance of 2015. The agency welcomes comment from end users of HCFC-225ca/cb, with specifics on their continued HCFC-225ca/cb needs, whether they are planning to transition to an alternative solvent prior to 2015, the time required to transition to alternatives for specific uses of HCFC-225ca/cb, and what hardships they would face with or without an exemption to the 605(a) use prohibition.

If EPA does not finalize an exemption for inventories of virgin HCFC-225ca/cb, use of all virgin HCFC-225ca/cb would be prohibited as of January 1, 2015 under the current regulations. EPA urges destruction of virgin ODS for which use is prohibited as the appropriate method for disposal. There are seven EPA-approved destruction technologies for ODS (see 40 CFR 82.3). EPA recognizes, however, that use of these technologies does have a cost. Further, the agency is concerned that some persons might dispose of their supplies of HCFC-225ca/cb in a manner allowing release into the environment if they are not allowed to use the substance for its intended purpose of cleaning. This could result in as much or more harm to the environment as the use of existing inventory as a solvent.

An important policy consideration is that the nature of precision cleaning is such that the group of affected entities is small, but their needs are very specific. Those needs often include minimal to zero flammability as well as excellent solvency properties, and if those needs are not met, human safety can be jeopardized (for example, in the case of future space vehicle launches). The agency believes that manufacturers of products containing HCFC-225ca/cb have sufficient lead time to use their remaining HCFC-225ca/cb inventory to manufacture products and place

them into initial inventory, or alternatively, to sell virgin bulk HCFC-225ca/cb to users of these solvents prior to 2015. However, EPA has heard from several entities that use HCFC-225ca/cb directly as solvents for cleaning existing equipment or for cleaning surfaces that are part of a newly-produced product who still have not found a suitable alternative to HCFC-225ca/cb. In some instances, entities need more time to test alternatives in order to ensure that the chosen replacement has acceptable solvency, flammability and usability characteristics. Also, in some areas of the United States, a number of federal, state and local regulations affect the choice of solvents. In particular, areas that are not meeting the national ambient air quality standard for ground-level ozone may regulate solvents that are volatile organic compounds (VOC) to reduce emissions that contribute to the formation of smog. HCFC-225ca and HCFC-225cb are exempt from the definition of VOC under CAA regulations (see 40 CFR 51.100(s)) addressing the development of State Implementation Plans (SIPs) to attain and maintain the national ambient air quality standards. This exemption allows greater flexibility in the use of HCFC-225ca/cb than is allowed for cleaning solvents that are regulated as VOCs. Only some SNAP-listed alternatives to HCFC-225ca/cb are exempt from the definition of VOC (e.g., *trans*-1-chloro-3,3,3-trifluoroprop-1-ene).

Given these legal and policy considerations, EPA is proposing a de minimis exemption to the use restriction in CAA section 605(a) for entities that use HCFC-225ca/cb as solvents and that have HCFC-225ca/cb in their inventory prior to January 1, 2015. The exemption would appear at 40 CFR 82.15(g). This exemption would not pertain to manufacturers of products containing HCFC-225ca/cb, such as technical aerosol solvents, or to producers and importers of HCFC-225ca/cb. Any aerosol solvent product manufactured prior to January 1, 2015, could be sold and used after that date, since an aerosol can is a product, not a controlled substance;

however, manufacture of the product or HCFC blends used in those products would be considered use of a controlled substance, and would be prohibited after January 1, 2015, unless the HCFC were used, recovered and recycled. The agency invites comment on the proposed exemption, particularly on the need for continued use of HCFC-225ca/cb after 2014. The agency is also seeking comment on whether there are other small niche uses of HCFCs that Congress may not have contemplated in the 1990 CAA Amendments for which a prohibition on use of inventory would yield trivial or no benefits in light of the statutory purpose. The agency may consider extending the proposed exemption to other such niche uses in the final rule.

*2. How is EPA Planning to Update Regulations to Account for Recent Changes to Section 605(a)?*

In the National Defense Authorization Act for fiscal year 2012, Congress amended section 605(a) of the Clean Air Act to allow for continued use and introduction into interstate commerce of a class II substance that “is listed as acceptable for use as a fire suppression agent for nonresidential applications in accordance with section 612(c).” Section 612 of the Clean Air Act requires EPA to develop a program for evaluating alternatives to ozone-depleting substances. EPA refers to this program as the Significant New Alternatives Policy (SNAP) program. Section 612(c) requires EPA to publish a list of the substitutes unacceptable for specific uses and to publish a corresponding list of acceptable alternatives for specific uses. The list of acceptable substitutes is found at [www.epa.gov/ozone/snap/lists/index.html](http://www.epa.gov/ozone/snap/lists/index.html), and the lists of “unacceptable,” “acceptable subject to use conditions,” and “acceptable subject to narrowed use limits” substitutes are found in the appendices to subpart G of 40 CFR part 82. HCFC-123, HCFC-124, and several blends containing an HCFC are currently listed as acceptable and acceptable subject to narrowed use limits, where the only use limit restricts use to nonresidential

fire suppression. EPA assumes that Congress intended the statutory phrase “listed as acceptable for use” to include HCFCs listed as acceptable and acceptable subject to narrowed use limits. In light of this statutory revision, EPA is proposing to update its regulations for use and introduction into interstate commerce of HCFCs (82.15(g)), as well as the regulations governing production and import (82.16). Specifically, the agency intends to add the following language to 82.15(g)(4) allowing for use and introduction into interstate commerce of any class II controlled substance not governed by the acceleration of the use prohibition to 2010, when used “as a fire suppression streaming agent listed as acceptable for use or acceptable subject to narrowed use limits for nonresidential applications in accordance with the regulations at subpart G of [part 82].” EPA believes this addition is necessary and appropriate, given Congress’ addition to section 605(a).

Though section (a) pertains only to use and introduction into interstate commerce, EPA believes that allowing for continued HCFC production and import for nonresidential fire suppression uses is a natural follow-on, and is in accordance with Congressional intent. Section 605 does not establish a production phaseout date for any specific HCFC. EPA has used its discretion to establish a regulatory phaseout date, which the agency is proposing to modify in this action. This change has minimal impact on the overall allocation since the primary HCFC used for fire suppression, HCFC-123, has a low ODP, and the quantities used for fire suppression are small relative to the other uses of HCFCs.

In large part, the regulatory phaseout date for HCFCs used in fire suppression was driven by the section 605(a) limitations on use and introduction into interstate commerce of class II controlled substances, to which Congress has now created an exception. Therefore, EPA is also proposing to amend 82.16(d), by allowing for HCFC production and import in the 2015-2019

regulatory period for use in nonresidential streaming fire suppression applications. Accordingly, EPA is proposing to add the following text to 82.16(d), allowing for both production and import of class II controlled substances “for use as a fire suppression streaming agent listed as acceptable for use or acceptable subject to narrowed use limits for nonresidential applications in accordance with the regulations at subpart G of [part 82].” To give practical effect to this proposed change, EPA is proposing to allocate consumption allowances for HCFC-123, not just for use as a refrigerant, but for use as a fire suppression agent as well. As discussed in section V.D.1., EPA is proposing to allocate the maximum allowed amount of HCFC-123 consumption allowances under section 605(b) (i.e., 100 percent of HCFC-123 baseline), which is still less than three percent of United States consumption allowed under the Montreal Protocol cap for 2015-2019. EPA is proposing to allow production and import for fire suppression purposes for the 2015-2019 regulatory period only. Beginning January 1, 2020, Article 2F of the Montreal Protocol limits United States production and import of HCFCs to use in servicing and repair of existing refrigeration equipment. Under section 614(b), where either the Montreal Protocol or Title VI is more stringent, the more stringent provision governs. To reflect this Montreal Protocol time limitation, EPA is proposing to add language to 82.16(e) indicating the purposes for which production and import may continue in 2020 and beyond: the proposed list does not include fire suppression purposes. The agency welcomes comment on any aspect of these proposed regulatory additions.

*C. Step Down to 10 Percent of Montreal Protocol Baseline*

As discussed in section II.A. of this preamble, the United States has agreed under the Montreal Protocol to limit consumption and production of HCFCs by January 1, 2015 to no more than 10 percent of its Montreal Protocol baseline. Starting in 2015, the United States cap on

consumption will be 1,524 ODP-weighted MT and the cap on production will be 1,553.7 ODP-weighted MT. By January 1, 2020, the United States is required to limit consumption and production of HCFCs to 0.5 percent of baseline. As required under sections 606(a) and 614(b) of the Clean Air Act, the EPA phaseout regulations reflect the Montreal Protocol schedule for phasing out HCFCs, including the 2015 and 2020 stepdowns. In developing the proposed HCFC allocation schedule for 2015-2019, the agency bore in mind that as of January 1, 2020, the consumption and production caps will be approximately 76 and 77.5 ODP-weighted MT, respectively. Also, as of January 1, 2020, Article 2F of the Protocol limits United States production and consumption of HCFCs to servicing needs for refrigeration and air conditioning equipment. In addition, CAA section 605(a) limits the use of virgin HCFCs as of January 1, 2015, to use as a refrigerant in equipment manufactured prior to 2020, and use as a nonresidential fire suppressant. EPA regulations also prohibit the production and import of virgin HCFC-22 or HCFC-142b for refrigeration uses as of January 1, 2020 (see 40 CFR 82.16(e)). In determining the proposed allocation options in this rule, EPA took into account the 2015 and 2020 milestones in the Montreal Protocol and the Clean Air Act.

#### **IV. How Will EPA Determine Baselines for 2015-2019?**

The current structure of the HCFC allowance program was first established in the 2003 Final Rule (68 FR 2820), in which EPA decided to allocate HCFC allowances using a baseline system for the 2003-2009 regulatory period. Specifically, calendar-year allowances for production and consumption of HCFCs would be issued as a percentage of each company's baseline. A company's baseline would be calculated from historic levels of production and import. Since 2003, the program has changed very little, using the same baseline system to issue consumption and production allowances on an annual basis.

In the 2003 Final Rule, EPA prohibited production and consumption of HCFCs subject to the allowance system without the appropriate allowances (40 CFR 82.15(a),(b)). The agency sets the maximum production and consumption of each HCFC by issuing allowances that are valid for a single calendar year, equal to a certain percentage of each company's baseline.<sup>12</sup> The agency determines the percentage of baseline for each year by taking into account limits set under the Montreal Protocol, estimated need for a particular HCFC, and restrictions under the Clean Air Act. 2015 is a significant milestone in the domestic phaseout of HCFCs, since United States production and consumption of all HCFCs must be at or below 10 percent of baseline levels by January 1, 2015, and use of those HCFCs must comply with restrictions in section 605 of the Clean Air Act.

*A. Using Existing Baselines*

In the 2003 Final Rule, EPA decided that each company producing or importing HCFC-22 or HCFC-142b between 1994 and 1997 would receive baseline allowances equal to its highest annual production and import level from those four years, with a limited extension for small businesses that began importing before April 5, 1999—the date EPA published the HCFC Allocation System ANPRM for the 2003-2009 regulatory period. In the 2009 Final Rule (74 FR 66412), EPA continued this approach for HCFC-22 and HCFC-142b. EPA also applied the same general approach to allocating allowances for HCFC-123, HCFC-124 and HCFC-225ca/cb, using 2005-2007 as the baseline years for those substances. The portion of the 2009 Final Rule

---

<sup>12</sup> The process works as follows for each HCFC: First, all the company-specific consumption baselines (listed in the table at 40 CFR 82.19) are added to determine the aggregate amount of consumption baseline. Second, EPA determines how many allowances to allocate in a given year and divides that amount by the aggregate amount of baseline allowances. The resulting percentage listed in the table at section 82.16 becomes what each company is allowed to consume in a given control period. For example, a company with 100,000 kg of HCFC-22 baseline consumption allowances would multiply that number by the percentage allowed (for example, 14.2 percent in 2014) to determine its calendar-year consumption allocation of 14,200 kg. Until the 2013 Final Rule, the percentage listed in 82.16 applied to production allocations as well. However, now that EPA has decoupled baseline percentages, there are two tables at 82.16 and the process of calculating baseline percentages applies to production as well.

governing baselines and allocations of HCFC-22 and HCFC-142b allowances was vacated by the Court in *Arkema v. EPA*. However, the rest of the rule, including the baselines for four other HCFCs and the use restrictions on HCFC-22 and HCFC-142b, remains in effect. HCFC-22 and HCFC-142b baselines and allowances were re-established for 2011 in the 2011 Interim Final Rule (76 FR 47451) and for 2012-2014 in the 2013 Final Rule (78 FR 20004).

In this rulemaking, EPA is proposing to keep the post-*Arkema* historical baselines as reflected in the 2013 Final Rule (as adjusted to reflect subsequent name changes and inter-company baseline allowance transfers) for the 2015-2019 regulatory period. The baselines for production and consumption of the seven HCFCs for which EPA has allocated allowances can be found at 40 CFR 82.17 and 82.19, respectively. The agency believes there is benefit to the regulated community in continuing with the established system, with updates to reflect name changes and inter-company baseline allowance transfers. In the past, some stakeholders have acknowledged the certainty and stability of continuing with established baselines. Others have pointed out that the established baselines do not reflect current market conditions. Because of this concern, the agency considered an option to update baselines, which in the case of HCFC-22 and HCFC-142b were derived from 1994-1997 data. However, EPA's preferred approach is to keep the current baselines in place. EPA has several reasons for maintaining historic baselines. EPA determines the total amount of allowances to be allocated independent from the baseline amounts. Re-establishing each company's baseline would alter the distribution of allowances, but would not affect the total allocation. EPA sets the baseline percentage such that once every company receives its allowances, the number of allowances issued equals the total allocation for that year. Therefore, EPA does not see an environmental rationale to updating baselines, since changing individual company baselines would not affect the total amount of HCFC-22 that could

be produced or imported in a given year. Further, choosing and implementing changed baseline years would change existing market expectations, and thus potentially may detract from the certainty that allows stakeholders, all of whom are already familiar with the existing system ( in place since 2003), to plan for an orderly transition to alternatives. Such a change may not be justified given that there are only five remaining years for HCFC allocation (excluding the 0.5 percent of baseline for servicing needs). Under EPA's preferred approach of maintaining current baselines, baseline allocations would be the same as those shown in the proposed regulatory text at 40 CFR 82.17 and 82.19.

EPA invites comment on the advantages and disadvantages of maintaining the established baseline system.

*B. Consideration of Establishing Revised Baselines Using More Recent Production and Import Data*

Current production and consumption baselines were established using data from 1994-1997 and 2005-2007. EPA's preferred option is to keep the current baselines. However, EPA considered a second option: re-establishing baselines using more recent production and import data. Updating baselines would result in fewer allowances for companies that have fully or partially left the HCFC market and a greater number of allowances for companies that have more recently used calendar-year allowances.

In the 2012 Proposed Rule (77 FR 237, January 4, 2012), the agency provided advance notice that for the 2015-2019 regulatory period, it would consider using more recent production and import data than the 1994-1997 data used to set baselines for the first time in the 2003 Final Rule. EPA was particularly interested in stakeholders' views on whether there would be an environmental benefit to updating baselines. In response to the proposed rule, the agency

received several comments, both for and against updating baselines, but did not receive any comments indicating there was an environmental benefit to changing baselines. In the 2013 Final Rule, EPA stated that it would continue to assess the merits of using a more recent set of years to determine HCFC-22 and HCFC-142b baselines, but pointed out that it still had not heard an environmental rationale for making such a change.

Further, the program's market-based orientation encouraged EPA to consider ways to promote an orderly phaseout – one in which stakeholders are offered advance planning certainty in their efforts to replace controlled chemicals. Thus, in completing the 2013 Final Rule we concluded that the certainty that facilitates orderly market transition to new, safer alternatives could be best promoted by maintaining expectations. Given the current state of the phaseout – within 5 years of virtual completion – the market may be best served by predictability and by the confirmation of long-established policy approaches.

In developing this proposed rule, the agency evaluated whether to update baselines for the 2015-2019 regulatory period. First, consistent with its earlier statements, EPA considered whether there would be an environmental benefit to doing so. Second, EPA considered how it would pick “a representative calendar year” or years to serve as the baseline, as required by CAA section 601. Third, EPA also considered whether the agency would credit only actual production and import, or if a company would receive credit for allowances held as the result of a transfer. Fourth, EPA considered the length of time the baselines have already been used, as well as the length of time remaining before the HCFC-22 and HCFC-142b phaseout.

Based on these considerations, EPA has decided not to propose to use a more recent set of years to establish company baselines. First, the agency does not see an environment benefit to using a more recent set of years: it is the percentage of baseline issued—not the aggregate

baseline itself—that determines the allowed amount of production and import in a given year. A shift to different baselines would simply rearrange companies’ shares of allowances. EPA has not made a practice of updating company baselines to reflect changes in the market. Rather, private entities may use the allowance transfer provisions in Part 82 to sell or acquire baseline allowances as appropriate. Second, it is unlikely that there is a more recent year or range of years that the majority of stakeholders could accept as representative. Third, while it would be important for the agency to consider whether to credit only actual production and import, or also allowances held as the result of a transfer, such consideration would introduce uncertainty into the process. Fourth, the use of production and import data from 1994-97 for HCFC-22 and HCFC-142b baselines began in the 2003 Final Rule and has continued through the present. These substances will be phased out in 2020. The current baselines are well understood by all affected entities and a change that would apply only to the last few years before the phaseout might simply cause confusion, in addition to affecting any longer-term business plans that companies may have based on the current baselines. Confusion resulting from resetting existing baselines would be counter to the Agency’s goal of promoting a smooth transition to alternatives. For these reasons, the agency is not proposing to update the baselines for the 2015-2019 regulatory period.

## **V. How Is EPA Developing Allocation Levels for Each HCFC?**

In developing proposed allocation levels, EPA considered what uses of HCFCs will be permitted in 2015 through 2019. Section 605(a) of the Clean Air Act limits the use of newly-produced (i.e. virgin) HCFCs beginning January 1, 2015. Under the statute, virgin HCFCs may

be used as a refrigerant in appliances<sup>13</sup> manufactured prior to 2020 (EPA accelerated this manufacturing date to 2010 for HCFC-22 and HCFC-142b)<sup>14</sup> and also as a nonresidential fire suppressant, if listed as acceptable under SNAP for this end use. HCFC-22 and HCFC-123 are both used as refrigerants, and thus EPA is proposing to issue allowances for these chemicals. HCFC-22 has many refrigeration applications, and accounts for over 90 percent of all HCFC use; HCFC-123, on the other hand, accounts for a much smaller portion of refrigerant use, predominantly in large chillers. HCFC-123 and HCFC-123 blends are also listed as acceptable or acceptable subject to narrowed use limits for nonresidential fire suppression uses. EPA is proposing to issue allowances for both HCFC-22 and HCFC-123; however, since refrigeration represents a larger market than fire suppression, nearly all consumption and production allowances proposed for 2015-2019 will be for HCFC-22. EPA is also proposing to issue consumption and production allowances for HCFC-142b and HCFC-124, since both are listed as acceptable for certain refrigerant end uses and there continues to be small, albeit decreasing, demand for refrigerant blends containing these HCFCs. In addition, HCFC-124 is listed as acceptable in certain fire suppression blends. The proposed allocation options for HCFC-142b and HCFC-124 are presented in section V.C. and V.E., respectively. EPA is not proposing to issue allowances for HCFC-225ca or HCFC-225cb because neither is used as a refrigerant nor as a fire suppressant. Use of HCFC-141b was banned effective January 1, 2010 under existing regulations (see 82.15(g)(1),(3)), with limited exceptions. In addition, the exemption from the

---

<sup>13</sup> The Clean Air Act defines appliance as “any device which contains and uses a class I or class II substance as a refrigerant and which is used for household or commercial purposes, including any air conditioner, refrigerator, chiller or freezer.”

<sup>14</sup> EPA accelerated the 605(a) use restrictions for HCFC-22 and HCFC-142b in the 2009 Final Rule. Consequently, HCFC-22, HCFC-142b and blends containing either can only be used as a refrigerant in appliances manufactured before January 1, 2010, not 2020. Additionally, the Clean Air Act allows use and introduction into interstate commerce of virgin HCFCs for use in transformation, but since this use does not require consumption or production allowances, it will not be discussed in this section.

production and import phaseout that allows for HCFC-141b exemption allowances does not continue beyond 2014 (see 40 CFR 82.16(b),(d)). Since the exemption does not exist beyond 2014, EPA is proposing, effective January 1, 2015, to remove 40 CFR 82.16(h), which describes the petition requirements for receiving HCFC-141b exemption allowances. However, in accordance with 40 CFR 82.18(a)(2) and (3), each company with an HCFC production baseline will receive Article 5 allowances<sup>15</sup> in 2015 through 2019 equal to 10 percent of its baseline for that HCFC, even if EPA does not issue consumption, production or exemption allowances for that substance.

The proposed allocations in the following sections are based on EPA's Vintaging Model demand projections, recent market research on current HCFC uses and trends, and the expected availability of recovered and reused material. In the case of HCFC-22 and HCFC-142b, EPA also considered the fact that under longstanding regulations, these two HCFCs will be phased out as of January 1, 2020. Thus, EPA will cease issuing HCFC-22 and HCFC-142b consumption and production allowances by 2020 at the latest. The agency has compiled Vintaging Model projections and other data supporting its proposed allocations for 2015-2019 in the *2013 Servicing Tail Report* on HCFC market needs, found in the docket to this rulemaking. EPA welcomes comment on all aspects of the report, including but not limited to the underlying assumptions and sensitivity analyses. Since the data in the report will be used to support the final allocations for 2015-2019, EPA requests any relevant data and market information that would improve the accuracy of the agency's projections. If commenters wish to submit confidential business information to support their comments on this proposal, please contact the person

---

<sup>15</sup> Article 5 allowances allow a company with an HCFC baseline to produce that HCFC only for export to Article 5 Parties under the Montreal Protocol. See 40 CFR 82.18(a).

identified in the “FOR FURTHER INFORMATION CONTACT” section and review section I.B.1. of this notice.

A. *How Will EPA Determine the HCFC-22 Consumption Allocation?*

EPA is considering three options for determining the HCFC-22 consumption allocation. Each would involve a declining allocation from year to year. Under the linear drawdown (Option 1), which is EPA’s preferred approach, the agency is proposing to decrease the allocation by the same amount each year, such that there is a linear decrease in allowances from 2015 through 2019, ending at zero in 2020. Under Option 2, EPA is proposing a three year version of the linear drawdown, where consumption is phased out in 2018 instead of 2020. Under the estimation approach (Option 3), EPA is proposing to estimate servicing need using the Vintaging Model, and then make adjustments to account for estimated recovery and reuse, and inventory, much like it did in the 2009 and 2013 Final Rules. Regardless of the option chosen, once the final rule is issued EPA does not intend to revise the 2015-2019 allocation. Leaving the possibility of additional EPA action to increase or decrease the allocation could create unnecessary uncertainty and undermine business planning and a smooth phaseout.

In 2009, EPA published the *2009 Servicing Tail Report* (available in the docket), which estimated HCFC-22 servicing need through 2020 using the Vintaging Model and several rounds of industry feedback. Through 2011 and early 2012, market factors and feedback from industry indicated there was an over-supply of HCFC-22, which was discouraging use of recycled refrigerant and slowing transition to ozone-safe alternatives. EPA developed *Analysis of HCFC-22 Servicing Needs in the U.S. Air Conditioning and Refrigeration Sector: Additional Considerations for Estimating Virgin Demand* (Adjustment Memo, available in the docket) to accompany the proposed rule for 2012-2014, which contained new proposed allocations in the

wake of the Court's decision in *Arkema*. The Adjustment Memo examined updated projections from EPA's Vintaging Model, and then took into account recent market conditions. The Adjustment Memo considered reductions in the allocation based on increased reclaimer capacity, existing HCFC-22 inventory, and recovery and reuse by supermarkets. After reviewing public comment and stakeholder feedback, EPA finalized HCFC-22 allowances for 2012, 2013 and 2014 in the 2013 Final Rule (78 FR 20004).

As presented in the revised *2013 Servicing Tail Report* included in the docket, EPA's Vintaging Model estimates that HCFC-22 servicing need in 2015 will be 46,165 MT, or 2,539 ODP-weighted MT. In 2015, the Montreal Protocol cap for all HCFC consumption is 1,524 ODP-weighted MT, which means that even if EPA allocated only HCFC-22 allowances, it still could not provide enough allowances to account for all projected HCFC-22 need. The gap in 2015 between projected servicing need and the Montreal Protocol cap is why EPA has continually emphasized the need for recovery, reuse and reclamation of HCFC-22, in addition to transition to non-ODS alternatives. Recovery, reuse and reclamation will become even more important in 2020, when HCFC-22 may no longer be produced or imported, but the projected servicing need is 22,572 MT.

EPA also uses the Vintaging Model to project the amount of recoverable HCFC-22 each year. This projection is based on the modeled retirement of HCFC-22 equipment and modeled recovery rates specific to each equipment type. For example, for residential air conditioning, the Vintaging Model assumes each system being retired in a given year has a full charge at decommissioning, and that an average of 35 percent of the refrigerant in each retiring system is recovered. For other end uses, particularly those with very large charge sizes, the modeled recovery rate is much higher. In the Vintaging Model, the overall, industry-wide recovery rate is

approximately 50 percent, though the exact number fluctuates each year based on the amount of equipment modeled as retiring in each end use. See Appendix A of the *2013 Servicing Tail Report* for modeled recovery rates specific to each equipment type.

In the *2013 Servicing Tail Report*, EPA has also included several sensitivity analyses to gauge how changes in several key assumptions affect estimated servicing need in 2015-2019. The assumptions EPA looked at include system charge size, average annual equipment leak rates (i.e., loss rates), and the expected length of time a system is in operation (i.e., equipment lifetime). All of these factors were examined as a result of information provided by industry representatives concerned that the agency's assessment of servicing need in the Vintaging Model could be too high. In addition to the sensitivity analyses, EPA has also updated its assessment of HCFC-22 inventory and is providing more discussion of other factors affecting the HCFC-22 phaseout. The agency welcomes comment on all aspects of the *2013 Servicing Tail Report*. This information will support the allocation option chosen in the final rule.

#### *1. Using a Linear Drawdown From 2014 Allocation Levels*

In 2020, the United States must be at 0.5 percent of its HCFC baseline, and under EPA regulations none of the HCFC production or import at that time may be for HCFC-22 or HCFC-142b. Given the agency's goal of ensuring a smooth transition away from HCFC-22 and into non-ODS alternatives, EPA is proposing a linear decrease in HCFC-22 allowances from 2015-2019. That is, allowances would decrease by the same amount each year, such that a decrease by that same amount from 2019 to 2020 would bring the HCFC-22 allocation to zero. Under the linear drawdown approach, EPA is proposing to use the lowest proposed 2014 allocation level as its starting point (approximately 16,500 MT). Under this approach, the 2015 allocation would be approximately 13,700 MT with an annual decrease of approximately 2,700 MT. In 2019 the

allocation would be 2,700 MT and in 2020 the allocation would be zero, with a total allocation of approximately 41,100 MT over the five year period. This linear drawdown—from the lowest proposed allocation in 2014 to zero in 2020—is EPA’s preferred approach. Since the market for virgin HCFC-22 is solely for servicing air-conditioning and refrigeration equipment that was installed prior to 2010 (with limited exceptions through the end of 2011), EPA believes that decreasing the allocation by the same amount each year will drive the necessary changes in the service market to prepare for the 2020 phaseout, without unnecessarily forcing transition or retrofits out of HCFC-22 for equipment that is still within its expected lifetime. Several industry representatives have also suggested a 2015 allocation very close to EPA’s preferred 2015 allocation of approximately 13,700 MT; their support for such an allocation stems from the belief that the allocation for 2013 and 2014 was higher than needed, resulting in an over-supply of HCFC-22 and an increase in inventory levels.

EPA believes its preferred 2015 allocation is sufficient based on how the market responded in 2012 and early 2013 to the allowed amount of consumption under the No Action Assurance (i.e., non-enforcement) letters. The 2015 proposed allocation is only about 20 percent lower than the allowed consumption at the start of 2013 (17,902 MT). At that time, there was minimal concern that allowed consumption levels were too low; certain industry practices were changing and significant inventory was available to meet servicing need (summarized below). EPA obtained this information through numerous conversations with stakeholders, all of which are noted in the memo in the docket titled *Relevant Meetings with External Stakeholders*.

First, channel inventory (i.e., existing material available for sale and distribution) likely helped meet servicing needs. Some industry feedback indicates a significant amount of inventory was consumed in 2012 to meet servicing needs. Industry feedback continues to indicate that

despite this drawdown there remains a significant amount of inventory that can help meet servicing need in 2015 and later years.

Second, servicing practices likely changed with the lower allocation to help meet servicing needs. With the price of HCFC-22 increasing, industry feedback indicates service technicians may have been more careful with the refrigerant, resulting in lower loss rates and higher recovery rates than those estimated in the Vintaging Model.

Third, industry feedback indicates the demand for dry-shipped HCFC-22 condensing units continued to decrease. This suggests that the service contractor or the consumer's repair/replace decision may be affected by the price and availability of HCFC-22.

Fourth, as the price of HCFC-22 increased and as equipment reached the end of its useful life, retrofits and system replacements occurred more rapidly than modeled. This is particularly apparent in the retail food segment. For example, feedback from numerous contacts in the supply chain indicate supermarkets used the seven- to 10-year remodel cycle to not only update display cases, but to also switch to new refrigerants (either through retrofits or system replacements). These retrofits result in significant amounts of used refrigerant that can be reclaimed, or recovered and reused. Feedback from several sources indicates HCFC-22 sales to supermarkets dropped off significantly in the past few years, especially in 2012 and early 2013, with the reduction in allocation. Information from recovery companies also shows that supermarkets were holding onto their recovered HCFC-22 from decommissioned or retrofitted stores for use in other equipment under the same ownership. This practice will likely accelerate as the phaseout progresses.

Other evidence indicates that service technicians also became more aware of and comfortable using non-ODS retrofit refrigerants. Feedback from numerous points in the supply

chain indicates sales of HCFC-22 retrofit refrigerants (e.g., R-407C, R-421A, R-422B, R-422D, R-438A, and numerous other non-ODS alternatives) have increased dramatically since 2011. This is also supported by data received recently from producers and distributors of HCFCs. As the phaseout progresses, the percentage of HCFC-22 demand met by retrofit refrigerants is expected to rise, thereby further reducing the need for HCFC-22 and adding to the potential inventory of reclaimed refrigerant.

While EPA encourages equipment owners to retrofit when it makes sense, the agency also encourages equipment owners to look at the lowest GWP refrigerant that meets their needs and to consider the capacity and efficiency tradeoffs associated with a retrofit out of HCFC-22. HCFC-22 is typically the most efficient refrigerant to use in a piece of equipment designed to use HCFC-22—an important consideration when servicing an existing system. When changing the type of refrigerant used in a system, technicians and contractors may only use substitutes listed as an acceptable retrofit refrigerant for that end use under the SNAP program. If replacing the equipment, new systems may only use refrigerants listed under the SNAP program as acceptable for new equipment for that end use. A complete list of acceptable substitutes by end use is available at [www.epa.gov/ozone/snap/refrigerants/](http://www.epa.gov/ozone/snap/refrigerants/). In addition to being illegal, failure to use an acceptable substitute may be unsafe. For example, equipment that is not designed for flammable refrigerants should not be retrofitted for use with hydrocarbons or other flammable substitutes

Fifth, as HCFC-22's price increased and its perceived availability decreased, reclamation increased by about 13 percent in 2012 from 8.3 million lbs to 9.4 million lbs. While the increase between 2011 and 2012 is only one year of data, the higher price of HCFC-22 was likely a factor since reclaimers started offering a higher buyback price for used material. Since the higher price

of virgin refrigerant also encouraged retrofits, HCFC-22 from retiring systems was available for recovery and reclamation.

EPA has attempted to quantify the possible effects on servicing need from many of these trends in the *2013 Servicing Tail Report*. Coupled with the fact that an additional two years of retrofits and system retirements will have occurred by 2015, the agency's analysis and feedback from industry affirm that the preferred allocation option can meet servicing needs without causing shortages. EPA seeks comment on its assessment of market trends and the agency's preferred allocation of 13,700 MT of HCFC consumption allowances in 2015, with an annual decrease in allocation of 2,700 MT.

EPA also notes that there appears to be a significant amount of HCFC-22 in inventory. As discussed in EPA's *2013 Servicing Tail Report*, EPA has revised its estimate of HCFC-22 inventory. In the last rulemaking, EPA estimated HCFC-22 inventory at 22,700-45,400 MT. Based on information received recently, inventory is above that range.<sup>16</sup> While excess HCFC-22 may provide the market more flexibility in its transition timeline, it may also discourage recovery and recycling of existing HCFCs. Since EPA has attempted to encourage recovery and reclamation throughout the HCFC phaseout, as well as a smooth transition, the agency is also seeking comment on whether a lower 2015 allocation is preferable. Specifically, EPA is proposing as an alternative a lower linear drawdown starting at 10,000 MT in 2015 and dropping by 2,000 MT per year before reaching zero in 2020. Over the five year period, it would result in approximately 11,000 MT fewer HCFC-22 allowances than under the agency's preferred approach and could encourage better refrigerant management practices and more recycling and reclamation.

---

<sup>16</sup> This revised assessment is based on inventory data from a limited number of companies as of December 31, 2012, as well as other information received by the agency during the development of this proposed rule.

Though all evidence received to date suggests that a 2015 allocation of 13,700 MT is sufficient to meet market needs, EPA is also proposing as an alternative a linear drawdown starting from the 2014 pre-recoupment<sup>17</sup> allocation of 20,100 MT and ending at zero in 2020. Under this alternative linear drawdown, the allocation would start at about 16,700 MT in 2015 and would decrease by about 3,350 MT each year over the five year period; over five years EPA would allocate 9,200 MT more than under the preferred linear drawdown approach.

As discussed in the preceding paragraphs, EPA is proposing higher and lower alternatives to its preferred approach for the linear drawdown. However, some stakeholders have encouraged EPA to go to zero and cease allocating allowances for HCFC-22 in 2015 instead of in 2020. They base this recommendation on the availability of alternatives, the capacity for reclamation, and the presence of a significant amount of inventory. While this approach could offer environmental benefits, the agency believes going to zero too quickly could have unintended consequences for end users that have been making equipment retrofit and replacement plans based on EPA's long-standing 2020 deadline for phasing out HCFC-22.

EPA believes the linear drawdown approaches discussed in this section have several advantages. First, a linear drawdown provides the market with a clear signal that features consistent annual decreases that will drive transition to alternatives in advance of the 2020 phaseout. The agency believes, and past commenters agree, that gradually decreasing the allocation provides the appropriate and necessary signal to encourage equipment owners and service technicians to transition when it makes sense for their individual circumstances. The linear drawdown allows the industry to establish plans in advance and develop the infrastructure

---

<sup>17</sup> Recoupment allowances refer to the additional HCFC-22 and HCFC-142b allowances that EPA allocated for 2013 and 2014, which were in addition to the aggregate allocations determined by the established percentage of baseline. EPA issued recoupment allowances to address the Court's decision in *Arkema* with respect to allowances for 2010. For a discussion of the agency's decision to provide recoupment, see the 2013 Final Rule at 78 FR 20015.

to transition without significant market disruptions. Without a gradual transition, large quantities of system owners could wait until the last possible moment to transition, which could pose significant financial hardship and lead to widespread market disruptions in the 2019 to 2020 timeframe as end users scramble to find solutions to the HCFC-22 phaseout. While the estimation approach (Option 3) also decreases year-by-year, the 2015 allocation is significantly higher than under the preferred linear drawdown approach.

Additionally, the change from 2019 to 2020 is substantially higher under the estimation approach than under any of the linear drawdown options, which could prompt system owners to stay in old HCFC-22 equipment longer, potentially contributing to market disruption. Regardless of the option chosen, a lower allocation could result in economic advantages for companies investing in reclamation and alternative refrigerants and equipment if it encourages consumers to use reclaimed refrigerant or an alternative sooner.

The linear drawdown is also simple and easy to explain. This aspect is important for service technicians, since they are the ones directly interacting with home and business owners. It is often their job to explain what the HCFC phaseout means and how it works. Providing technicians with an easier-to-explain transition should improve consumers' understanding of the phaseout and the options available to them.

Finally, this linear drawdown approach is preferred because it does not primarily rely on EPA's ability to predict annual servicing need, which becomes increasingly difficult as HCFC-22 is phased out. While the Vintaging Model is updated frequently to reflect changes in the marketplace, it doesn't model how the allocation in recent years affects servicing need in future years. For example, the final 2013-2014 allocations will affect how HCFC-22 is bought, sold and stockpiled in each year. While there are limitations of the model, the sensitivity analyses in the

*2013 Servicing Tail Report* indicate the proposed linear drawdown approach is reasonable and can meet servicing need without shortages if servicing practices improve, and recycling and transition occur. The linear drawdown approach also takes into account how the market responded in 2012 and 2013 under the agency's No Action Assurance, which indicates the linear allocation approach may even more accurately reflect servicing need.

The agency is also proposing a linear drawdown option that would use fewer steps and less time to arrive at an HCFC-22 allocation of zero. Option 2 in Table 1 shows a linear drawdown over three years instead of five, resulting in a consumption allocation of zero in 2018 instead of 2020. One possible benefit of decreasing the HCFC-22 allocation to zero sooner would be increased incentive to recover and recycle HCFC-22, and increased incentive to transition to alternatives and replace older, less energy efficient equipment. The three year linear drawdown provides environmental benefits as compared to the five year linear drawdown because it issues fewer HCFC-22 consumption allowances over the five year period. As under the five year linear drawdown (Option 1), EPA is proposing to use the lowest proposed allocation in 2014 as a starting point. The 2015 allocation would therefore be approximately 12,400 MT, with an annual decrease of about 4,100 MT such that 2017 would be the final year of HCFC-22 consumption allowances (Option 2 in Table 1). In total, Option 2 would result in approximately 24,800 MT of allowances, which is 16,200 MT fewer than under EPA's preferred five year linear drawdown approach. EPA is also proposing a variant to this three year linear drawdown under which the agency would start from the pre-recoupment 2014 allocation of 20,100 MT. EPA seeks comment on its alternative proposal to base the allocation on a three year linear drawdown instead of five years, and on whether, in this case, the 2015 allocation should be determined from the lowest proposed amount in 2014 or the actual 2014 allocation prior to the

addition of recoupment allowances. Regardless of which variant of the three year linear drawdown is chosen, it would provide the largest environmental benefit of the options presented in this rule, since it results in the fewest allowances overall.

In summary, EPA believes a linear drawdown helps ensure a smooth, simpler transition out of HCFC-22. This method of decreasing allowances does not rely directly on EPA's estimate of HCFC-22 servicing needs or changes in demand for refrigerant, though the *2013 Servicing Tail Report* does confirm that a linear drawdown of allowances would still enable projected servicing need to be met under plausible recovery and reuse scenarios and changes in servicing practices. As a result, the agency believes making simple and consistent reductions in allowances each year could provide the certainty the market needs to transition smoothly from HCFC-22 to non-ODS alternatives.

The agency welcomes comment on the benefits or drawbacks to a linear allocation schedule, as well as comments on both linear drawdown options (Options 1 and 2 in Table 1) and the proposed variants of Option 1 and Option 2, which are discussed in this section but not shown in Table 1.

## *2. Determining the Allocation by Estimating Servicing Need and then Accounting for Need that Can Be Met by Sources Other than New Production*

While not its preferred approach, EPA is also proposing to take the modeled servicing need for 2015-2019 as estimated in the *2013 Servicing Tail Report*, subtract the amount of expected recovery and reuse, and then issue consumption allowances to account for the remaining HCFC-22 need. This is the estimation approach, shown as Option 3 in Table 1. In the 2009 Final Rule covering 2010-2014, comments on the *2009 Servicing Tail Report* prompted EPA to account for 12,500 MT of recovery and reuse in each year. That is, the allowances issued

each year were 12,500 MT lower than the modeled servicing need for HCFC-22. This same methodology was used in the 2013 Final Rule covering 2012-2014, except the 2013 Final Rule also accounted for existing inventory, which could be used to meet servicing need as well. When EPA addressed existing inventory in the 2013 Final Rule, it did not necessarily intend to address inventory in subsequent rules or make it part of the ongoing allocation methodology. However, recent data received by EPA indicates there still is a significant inventory of HCFC-22. The proposal to account for existing inventory when setting the final HCFC-22 allocation under this option is discussed in section V.A.3.

In 2015, the amount of projected servicing need, minus the amount of expected recovery<sup>18</sup> and reuse, is actually higher than the 2014 allocation of 23,100 MT. The agency does not see any reason to increase the allocation from 2014 to 2015 because allowing the allocation to increase from 2014 to 2015 could reduce incentives for recovery and transition. In addition, EPA has received feedback from stakeholders that the final allocations for 2013 and 2014 were higher than the market was expecting. Thus, under this approach, the agency is proposing to issue the same amount of allowances in 2015 as in 2014, instead of allowing the allocation to increase in 2015. EPA would then apply the methodology presented earlier in this section to years 2016 through 2019. EPA is proposing to use the currently modeled average recovery and reuse rate of approximately 50 percent. The resulting allocation schedule would start at 23,100 MT in 2015 and end at 6,200 MT in 2019 before going to zero in 2020, shown as Option 3 in Table 1 of this section. EPA welcomes comment on using the estimation approach to allocate allowances, in addition to comments on model parameters, such as the recovery rates used in the model for each end use and the installed equipment base (see *2013 Servicing Tail Report* and

---

<sup>18</sup> The expected recovery rate is approximately 50 percent industry-wide and is listed as the baseline recovery rate in the *2013 Servicing Tail Report* available in the docket.

appendices). The agency is especially interested in comment on modeled equipment characteristics, like expected lifetime, charge size and leak rate, since assumptions about equipment characteristics affect the projected servicing needs for each end use.

**Table 1: Proposed Options for HCFC-22 Consumption Allocation in 2015-2019 (metric tons)**

<b>HCFC-22 Proposed Consumption Allocation Options</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Option 1: Linear drawdown over 5 years	13,700	10,900	8,200	5,500	2,700	0
Option 2: Linear drawdown over 3 years	12,400	8,300	4,100	0	0	0
Option 3: Estimation Approach	23,100	20,900	15,100	11,500	6,200	0

### *3. Accounting for Existing HCFC-22 Inventory*

As stated earlier in this section, EPA did not commit itself to account for existing HCFC-22 inventory when setting the allocations for 2015-2019; however, EPA is proposing to account for existing inventory for two primary reasons. The first is that EPA has heard from stakeholders that industry-wide inventory is still very large. In addition, many feel that the final 2013 and 2014 allocations were higher than the market needs, and will therefore lead to a buildup of additional HCFC-22 stocks going in to 2015. The second reason EPA is proposing to account for existing inventory is based on the agency's fall 2011 market analysis supporting its proposal to reduce allowances, as compared to the 2009 Final Rule (see Adjustment Memo, included in the docket to this rulemaking). That analysis assumed there was a surplus inventory between 22,700 and 45,400 MT at the beginning of 2012. Given expectations about the transition away from HCFCs, as well as the 2015 and 2020 HCFC phaseout milestones, EPA estimated that the complete drawdown could take somewhere between four to eight years. Based on its estimates of existing inventory, EPA proposed and finalized a 6,000 MT reduction in allowances for 2012-

2014. Given that a 6,000 MT reduction over 2012-2014 is only 18,000 MT total, the agency believes there still is ample existing supply of HCFC-22. Recent data from stakeholders confirms that the inventory level is above the high end or above EPA's previous estimate. As such, EPA is proposing to account for up to 10,000 MT of inventory each year in 2015-2019 under the estimation approach. EPA is also proposing to make larger annual reductions in the earlier years and smaller annual reductions in the later years under this approach. Such a tapered approach to accounting for existing inventory would be consistent with the recent feedback and comments that EPA has received. Many stakeholders have noted that sending strong market signals early in the control period is fundamental to preparing the market for the complete phaseout of virgin HCFC-22 production and import by 2020.

For this modified estimation approach, as well as the linear drawdown approaches, the agency will consider inventory data in choosing its final allocation methodology and welcomes comment on its approach.

*B. How Will EPA Determine the HCFC-22 Production Allocation?*

Since the start of the HCFC phaseout program in 2003, the agency has determined the HCFC-22 production allocation in one of two ways. Under either method, EPA first determines the aggregate *consumption* allocation needed and assigns the consumption baseline percentage accordingly. The process for assigning consumption baseline percentages works as follows: first, all the company-specific baselines listed in the tables at 40 CFR 82.19 are added to determine the aggregate consumption baseline. Second, EPA determines how many consumption allowances to allocate for a given year and divides that amount by the aggregate baseline. The resulting percentage listed in the table at section 82.16 becomes what each company is allowed to consume in a given control period. For example, a company with 100,000 kg of HCFC-22

consumption baseline allowances would multiply that number by the percentage allowed in a given year (for example, 25 percent) to determine its calendar-year consumption allowance is 25,000 kg.

In the 2003 Final Rule covering 2003-2009, and again in the 2009 Final Rule covering 2010-2014, EPA allocated the same percentage of baseline allowances for production as it did for consumption. A company with a production baseline at 40 CFR 82.17 would simply multiply its baseline by the percentage listed at 82.16 to determine its calendar-year production allocation. However, in the 2013 Final Rule covering 2012-2014, EPA provided a larger percentage of baseline and more HCFC-22 production allowances than it did for consumption. That is, section 82.16 was amended to include two tables, one listing the baseline percentage for consumption and the other listing the percentage for production. As discussed in the 2013 Final Rule, the reason for this change was to allow United States manufacturers to produce at the same level as under the 2009 Final Rule and continue to compete globally, and to potentially reduce the need for less efficient production abroad (see 78 FR 20020).

For the 2015-2019 regulatory period, EPA is considering two options for the HCFC-22 production allocation: 1) issue production allowances at the highest allowable level under the Montreal Protocol to continue to allow United States producers to compete globally much like it did in the 2013 Final Rule covering 2012-2014, which is the agency's preferred approach or 2) provide approximately the same number of production allowances as consumption allowances.

*1. Allocate the Maximum Production Allocation Allowed Under the Cap*

In the 2013 Final Rule, EPA determined that it has the authority to issue calendar-year consumption and production allowances using different percentages of baseline, as long as the agency complies with the overall schedule set by the Montreal Protocol and Congress, as

accelerated under section 606. Therefore, the agency has the ability to set baseline percentages such that the aggregate production allocation is larger than the consumption allocation. See the 2013 Final Rule (78 FR 20018) for a discussion of EPA's ability to decouple production and consumption baselines.

As stated in the 2013 Final Rule, EPA believes that allocating more production allowances than consumption allowances cannot lead to an increase in United States consumption, would not result in a global increase in production or consumption of HCFC-22, but could result in more United States production for export relative to the scenario in which production allowances are at approximately the same level as consumption allowances. This may have economic benefits for the United States and potentially environmental benefits to the extent that production might otherwise occur in plants that lack HFC-23 byproduct destruction technologies. EPA's preferred approach is to allocate more production allowances than consumption allowances, up to the maximum allowed under the Montreal Protocol cap.

Allocating more production allowances than consumption allowances would not provide United States producers the opportunity to produce more HCFCs for domestic consumption than the amount allowed by the consumption allocation. Production of one kilogram of an HCFC still requires both a production allowance and a consumption allowance (82.15(a)(1), (2)). Allocating more production than consumption would provide United States producers the opportunity to continue production for export subject to existing regulatory constraints. A company must submit documentation to verify the export of an HCFC for which consumption allowances were expended in order to request a reimbursement of spent consumption allowances. The agency reviews the documentation and issues a notice to either deny or grant the request. Therefore, a

company would not be able to produce more HCFC-22 unless it had exported an equal amount of material and been granted a refund of spent consumption allowances.

As mentioned previously, EPA also believes that allocating more production allowances than consumption allowances could have environmental benefits if United States production displaces production at facilities that do not control byproduct emissions of hydrofluorocarbon (HFC)-23, which has a global warming potential of 14,800.<sup>19</sup> In the 2013 Final Rule, EPA responded to comments that cited the growth of HFC-23 emissions globally and indicated that facilities in Article 5 countries do not control HFC-23 emissions to the same degree as companies operating in the United States. EPA has worked with industry through its HFC-23 Emission Reduction Partnership to encourage companies to reduce HFC-23 byproduct emissions from the manufacture of HCFC-22. Production of HCFC-22 in the United States may provide environmental benefits in reduced HFC-23 emissions to the extent United States production supplants the Article 5 production in those specific plants that do not have HFC-23 byproduct destruction technologies installed. For further discussion of HFC-23 byproduct emissions in Article 5 countries, see the 2013 Final Rule at 78 FR 20021.

EPA also determined in the 2013 Final Rule that allowing United States production to remain at the levels finalized in the 2009 Final Rule would not result in increased global consumption. Providing more production than consumption allowances could allow companies to continue exporting to non-Article 5 countries, which have the same overall Montreal Protocol phaseout schedule as the United States but may not use the United States' chemical-by-chemical approach to phasing out HCFCs. Also, consumption of HCFCs in Article 5 countries was capped starting in 2013, which further limits global HCFC-22 demand (*see* Montreal Protocol Art. 5,

---

<sup>19</sup>GWP of HFC-23 presented in the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report: Climate Change 2007 (AR4)

para. 8 *ter.*). And finally, at least one company holding production allowances does not produce HCFC-22 in the United States, so it is unlikely that every production allowance issued will be used. EPA is concerned that the alternative approach—issuing production allowances at the same level as consumption, instead of at the maximum level allowed under the cap—could deprive United States manufacturers of existing global business.

Therefore, EPA is proposing to issue the maximum number of HCFC-22 production allowances allowed under the Montreal Protocol cap, after accounting for production allocations of any other HCFCs. Starting in 2015, the United States production cap under the Montreal Protocol is 1,553.7 ODP-weighted MT; when converted entirely to HCFC-22, the production cap is 28,249 MT of HCFC-22. To put the 2015 cap in perspective, EPA issued 41,200 MT of HCFC-22 production allowances in 2013 and 36,000 MT in 2014. Allocating the maximum allowed under the cap would still be a significant decrease from 2013 and 2014 production allocations. EPA is proposing to take the cap of 1,553.7 ODP-weighted MT, subtract the final production allocation for any other HCFCs, and then issue the remaining amount for HCFC-22 production. Under the agency's preferred options for all other production allocations, the resulting HCFC-22 allocation in 2015-2019 would be approximately 28,000 MT, or 21.7% percent of baseline. EPA welcomes comment on this approach.

## *2. Allocate Approximately the Same Number of Production Allowances as Consumption Allowances*

A second option for determining the HCFC-22 production allocation is to issue approximately the same number of production allowances as consumption allowances. Under this approach, the production allocation would be significantly lower than in 2013 and 2014. The highest proposed consumption allocation in this rulemaking is 23,100 MT in 2015, which is

close to half as much as the 2013 production allocation and about two-thirds as much as the 2014 production allocation. This approach could result in less United States production for export, with economic disadvantages for the United States and potentially environmental disbenefits to the extent that more production might occur in plants that lack HFC-23 byproduct destruction technologies.

Under this approach, EPA would determine the desired aggregate consumption allocation in each year and set the percentage of consumption baseline accordingly. The percentage of *production* baseline issued would be whatever percentage results in an aggregate production allocation that is approximately equal to the aggregate consumption allocation. EPA welcomes comment on the merits of this option.

*C. How Will EPA Determine the HCFC-142b Allocation?*

In the 2009 Final Rule for 2010-2014, EPA allocated 100 MT of HCFC-142b consumption allowances for each of those years (74 FR 66412). When EPA re-established HCFC-22 and HCFC-142b baselines in the 2011 Interim Final Rule and 2013 Final Rule, the HCFC-142b consumption allocation remained at 100 MT. However, since the HCFC-142b production baseline was significantly higher than the consumption baseline, and the same percentage of baseline was used for both consumption and production, the production allocation became 463 MT (not including recoupment) in 2011-2014.

As discussed briefly in the *2013 Servicing Tail Report*, the Vintaging Model does not model demand for HCFC-142b uses after 2014. However, several HCFC manufacturers anticipate continued, albeit decreasing, sales of refrigerant blends containing HCFC-142b in 2015 and later. HCFC-142b is predominantly used in refrigerant blends that have historically served as replacements for CFC-12 and R-500 in medium- and large-sized refrigeration

equipment. It is important to note that some of these blends containing HCFC-142b, namely R-409A, are in use today but are not modeled in the Vintaging Model; thus, the model is not an accurate reflection of the niche refrigeration needs for HCFC-142b. Given that the agency knows there is some R-409A equipment in use based on refrigerant sales data collected by the California Air Resources Board (see *Preliminary 2011 and 2012 Sales and Distribution Data from the California Air Resources Board's Refrigerant Management Program* in the docket) and industry feedback, the agency is proposing to allocate 35 MT in 2015 with a decrease of 5 MT each year. EPA believes an allocation of 35 MT in 2015 is an appropriate balance between the 2010-2014 allocation of 100 MT, the actual consumption of HCFC-142b in recent years, and the fact that while R-409A is still needed, it is used mainly in CFC retrofitted equipment (i.e., equipment that is at or is nearing its expected retirement). With an annual decrease of 5 MT, the HCFC-142b allocation would be 15 MT in 2019. The agency thinks that a decreasing allocation sends a stronger market signal that production and import of HCFC-142b are ending, as compared to a constant allocation in all five years. Such a signal should help encourage equipment owners to transition to more energy efficient equipment that uses non-ODS refrigerants. EPA will consider issuing up to 100 MT of HCFC-142b consumption allowances, but would need substantial data supporting such an allocation. Specifically, EPA would need to know for which blends, in what quantity and for what end use(s) the HCFC-142b is needed.

EPA is proposing to issue HCFC-142b production allowances at the same level as consumption, not the same percentage of baseline. Given historic exports of HCFC-142b, EPA does not believe the same rationale for allowing production to be higher than consumption applies to HCFC-142b as it applies to HCFC-22. In the 2013 Final Rule, HCFC-142b production was higher than consumption due to the different changes in production and consumption

baselines, not due to any concerns about HCFC-142b export (as was the case for HCFC-22 production). The agency would consider issuing up to 100 MT of production, even if the final consumption allocation is lower, if there is documented need for United States-produced HCFC-142b in other non-Article 5 countries. The agency is not proposing to issue any more than 100 MT of HCFC-142b production allowances. EPA requests comments on its proposal, as well as data on current and future needs of HCFC-142b.

*D. How Will EPA Determine the HCFC-123 Allocation?*

HCFC-123 is currently used as a refrigerant and as a fire suppression agent, which are the two consumptive uses of virgin HCFCs permitted by section 605(a) of the CAA as of January 1, 2015. The agency is proposing to issue consumption allowances to allow import for these two uses. For the 2010-2014 regulatory period, EPA issued approximately 2,500 MT of HCFC-123 consumption allowances each year, which is 125% of the HCFC-123 consumption baseline. EPA has never established a production baseline for HCFC-123, and the agency has no record of domestic production of HCFC-123 for consumptive uses during the baseline years (2005-2007). Section 605(b) of the Clean Air Act restricts production of any class II substance to 100% of baseline levels or less beginning on January 1, 2015. Section 605(c) requires that consumption of class II substances be phased out on the same schedule as production. The agency's reading of 605(b) and 605(c) together is that as of January 1, 2015, EPA may allocate no more than 100 percent of baseline for production or consumption of each class II substance. This milestone is part of the phaseout schedule contained in the CAA. EPA has accelerated the section 605 phaseout schedule under the authority of section 606. Nevertheless, the 2015 milestone in section 605(b) is still relevant because it applies to each class II substance individually. This is in contrast to the basket approach contained in the Montreal Protocol. Under section 614(b), where

there is a conflict between Title VI of the CAA and the Montreal Protocol, “the more stringent provision shall govern.” With respect to individual substances, section 605 is more stringent. Thus, for the 2015 control period and beyond, EPA may not allocate more than 100 percent of baseline for any class II substance. EPA did determine in the 2013 Final Rule that the percent of production and consumption baseline allocated as calendar-year allowances may be different, but only so long as the phaseout of a substance continues on the same overall schedule presented in the CAA and the Protocol (78 FR 20004). See the 2013 Final Rule and the accompanying Response to Comments for a complete discussion of the agency’s authority to decouple production and consumption percentages.

In considering allocation options, EPA has looked at the projected need for virgin HCFC-123 for refrigeration and nonresidential fire suppression uses. EPA’s modeled need for each of these uses is presented in the *2013 Servicing Tail Report*, included in the docket to this rulemaking. EPA is taking comment on the remaining refrigerant and fire suppression uses of HCFC-123, how much is needed, and why non-ODS alternatives could not meet this need. Commenters should clarify the quantity of their specific needs, in addition to any broader comments on industry demand for HCFC-123.

Under the current phaseout regulations, beginning in 2015, production and import of HCFC-123 is limited to servicing of existing refrigeration and air conditioning equipment only. EPA is proposing to revise section 82.16(d) to allow production and import of HCFC-123 for fire suppression purposes to complement section 605(a)(4) of the CAA. This exemption would sunset on December 31, 2019 because, as discussed in more detail in Section II.A. of this preamble, beginning in 2020, Article 2F of the Montreal Protocol restricts production and import

of HCFCs to servicing of existing refrigeration and air conditioning equipment.<sup>20</sup> Under section 614 of the CAA, where either the Montreal Protocol or the CAA is more stringent, the more stringent provision governs. While virgin HCFCs could continue to be *used* in fire suppression applications, EPA does not intend to issue consumption allowances for fire suppression after 2019. In addition, beginning in 2020, section 605(a) of the CAA prohibits the use of virgin class II substances in the installation and/or manufacture of new AC and refrigeration systems. Any HCFC-123 consumption allowances issued after 2019 would only allow HCFC-123 import for use as a refrigerant for servicing existing HCFC-123 systems.

EPA's understanding is that much of the HCFC-123 refrigerant in use today is to service and manufacture low pressure chillers, which have relatively long expected lifetimes; the Vintaging Model assumes a 27-year average lifetime, and the United States tax code uses a 39-year depreciation schedule for a category of equipment that includes HCFC-123 chillers (26 USC §168). Given the expectation that these chillers will last for well over 20 years, EPA seeks comment on whether it should provide a static amount of HCFC-123 allowances through 2019, or whether it should begin to gradually reduce HCFC-123 allowances now to foster transition. The two proposed options for issuing HCFC-123 consumption allowances are outlined below, though EPA's preferred option is to issue 100 percent of the HCFC-123 baseline. Commenters should explain why they prefer either option in as much detail, and with as much quantitative reasoning, as possible.

#### *1. Allocate 100 Percent of HCFC-123 Consumption Baseline Through 2019*

EPA is proposing to issue approximately 2,000 MT of HCFC-123 consumption allowances for each year from 2015-2019, which is the maximum allocation allowed under the

---

<sup>20</sup> Use of HCFC-123 that was imported prior to 2020, or that is used, recovered and recycled, is still allowed beyond January 1, 2020.

CAA because it is equal to 100 percent of the consumption baseline. The agency believes this amount would be sufficient to meet the refrigeration and nonresidential fire suppression needs, even though projected need is 2,200 MT in 2015-2018 and 2,300 MT in 2019. EPA expects 2,000 MT of HCFC-123 allowances will be sufficient to meet modeled need because the Vintaging Model projects that at least 330 MT of HCFC-123 will be available for recovery and reuse in 2015, and even more should be available in later years, mainly because HCFC-123 chillers have high (90 percent) expected recovery rates due to their large charge size. So while this proposed option does not incorporate specific reductions for recovery and reuse, it does assume that some demand for HCFC-123 can be met with recovered material. EPA prefers this approach because 1) the allocation is still below modeled need; 2) HCFC-123 may be produced and imported for use as a refrigerant until 2030; and 3) there are no commercially available alternatives to HCFC-123 in low-pressure chillers as of mid-2013. EPA welcomes comment on its preferred proposal to issue 2,000 MT in each year, and again notes that it cannot issue more than 100 percent of the HCFC-123 baseline.

## *2. Allocate Less Than 100 Percent of HCFC-123 Consumption Baseline*

EPA is proposing in the alternative to issue only enough HCFC-123 allowances to meet anticipated need, after specifically accounting for recovery and reuse. Under this option, EPA would allocate 1,900 MT of consumption allowances in 2015-2017, and 1,400 MT of allowances in 2018 and 2019. The objective of this approach is to foster recovery and reuse, and to recognize that while virgin production of HCFC-123 could occur through 2029, HCFC-123 equipment can only be manufactured through 2019. As shown in Table 4-12 of the *2013 Servicing Tail Report*, the total servicing demand plus the demand for charging new refrigeration and fire suppression equipment is 2,200 MT in 2015-2018 and 2,300 MT in 2019. After

subtracting the amount of that total demand that EPA estimates can be met by recovered and reused material, the remaining need that would be met by virgin production is equal to the proposed allocation in each year. For 2015-2017 the proposed allocation is 1,900 MT, dropping to 1,400 MT in 2018 and 2019, as discussed in the *2013 Servicing Tail Report*. The agency is seeking comment on this approach, especially the HCFC-123 need estimates presented in the *2013 Servicing Tail Report*, to what extent need could reasonably be met with recovered material and to what extent commenters believe the HCFC-123 allocation will affect transition to alternatives.

*E. How Will EPA Determine the HCFC-124 Allocation?*

Though HCFC-124 has both refrigeration and fire suppression applications that are listed as acceptable under the Significant New Alternatives Policy (SNAP) program, its primary use today is in sterilant blends. Beginning January 1, 2015, CAA section 605(a) prohibits the use of virgin HCFCs as sterilants, since sterilant use is not one of the four statutory exceptions. As discussed earlier in section III.B. of this preamble, 605(a) restricts the use of bulk class II substances, not products containing class II substances. However, manufacture of a product is considered “use” of a bulk substance and therefore is prohibited beginning January 1, 2015, unless the manufacturer is using recovered and recycled HCFC-124. EPA’s understanding is that most of the sterilant industry is on target to transition to non-ODS alternatives prior to January 1, 2015, but welcomes comment on the transition out of HCFC-124 sterilants, particularly the status of sterilant users’ transition to alternatives.

While most HCFC-124 use is as a sterilant, there are, in fact, several refrigerant blends with HCFC-124 that are listed as acceptable by the SNAP program. These blends include: R-401A, R-401B, R-409A, R-414A, R-414B and R-416A. Similarly, EPA has also listed as

acceptable certain fire suppression alternatives that contain HCFC-124. For total flooding applications, EPA has listed neat HCFC-124 and HCFC Blend A (NAFS-III) as acceptable alternatives to Halon 1301. For streaming applications, the agency has listed neat HCFC-124 and HCFC Blend C (NAF P-III) as acceptable alternatives to Halon 1211. However, the agency is not aware of any HCFC-124 fire suppression uses in the United States.

Given the small projected need for HCFC-124 beyond 2014 and the continued use of certain refrigerant blends containing HCFC-124, the agency is proposing to issue some HCFC-124 allowances in 2015-2019, consistent with the most recent Vintaging Model projections of HCFC-124 servicing need and recent feedback from industry stakeholders. Due to the very small projected need, HCFC-124 is only discussed briefly in the *2013 Servicing Tail Report*; the remainder of the HCFC-124 discussion is included here. The estimated need in the Vintaging Model decreases from 4.5 MT in 2015 to 3.1 MT in 2019, with just over half of the need modeled for use in Industrial Process Refrigeration and the other half for Medium Retail Food. EPA could propose to allocate just 4 MT in each year, but the agency recognizes that the Vintaging Model may not capture all current uses of HCFC-124 refrigeration equipment, as is the case with HCFC-142b equipment. Based on Vintaging Model estimates, along with industry feedback on the needs and uses of HCFC-124, and the use of HCFC-124 allowances in recent years, EPA is proposing to allocate 200 MT of HCFC-124. For reference, the 2010-2014 consumption and production allocations are roughly 3,000 MT and 5,000 MT, respectively, though reported consumption and production has been substantially less in recent years. EPA's goal is to ensure that servicing needs can be met, while also encouraging recovery and reuse or transition to non-ODS refrigerant blends. An allocation of 200 MT supports this goal because it accounts for allowed end uses of HCFC-124 that may not be captured by the Vintaging Model

(e.g. use of niche refrigerant blends containing HCFC-124), but also recognizes that the primary use of HCFC-124 will no longer be allowed as of January 1, 2015.

Unlike HCFC-123, companies do have HCFC-124 production baselines and so EPA is proposing to allocate consumption and production at the same level. EPA's preferred approach is to allocate 200 MT of production and consumption allowances to allow for limited manufacture of niche refrigerant blends; however, the agency is proposing in the alternative to issue as few as 4 MT of HCFC-124 consumption and/or production allowances, consistent with the Vintaging Model projections. This is not EPA's preferred allocation, but the agency is open to comments in support of this lower proposed option if commenters can provide evidence suggesting that the allocation should be as low as 4 MT. Similarly, EPA is also requesting data from commenters in support of allocating up to 400 MT of HCFC-124 allowances and is proposing to issue up to 400 MT if comments and data warrant an increase. The agency seeks comment on the transition or retrofit plans of equipment owners, and for how long they expect to need virgin HCFC-124.

*F. How Will EPA Determine the HCFC-225ca/cb Allocation?*

According to the *2009 Servicing Tail Report*, more recent updates to EPA's Vintaging Model and conversations with stakeholders, HCFC-225ca and HCFC-225cb are used only as solvents, usually in precision cleaning of electronics, optical equipment or liquid oxygen systems. In the 2009 Final Rule, the agency used HCFC-225ca/cb as an example of the future effects of the section 605(a) use restriction, stating that "HCFC-225ca and HCFC-225cb are generally used as solvents, but as of January 1, 2015, under section 605(a), HCFCs may not be used as solvents" (74 FR 66433). This restriction is reflected in the regulations at section 82.15(g). However, as discussed in section III.B, EPA is proposing a limited exemption to allow

entities that have HCFC-225ca/cb in their inventory prior to January 1, 2015 to continue to use their HCFC-225ca/cb as a solvent beyond that date.

The proposed exemption would apply only to use of HCFC-225ca/cb as a solvent by persons who hold that HCFC-225ca/cb in their inventory as of January 1, 2015; EPA is not proposing an exemption from the restriction on introduction into interstate commerce of HCFCs for solvent purposes. Accordingly, the agency is not proposing to issue any allowances for the production or consumption of HCFC-225ca/cb. Combined with the continued use of products containing HCFC-225ca/cb, EPA's understanding from stakeholders is that an exemption to the use prohibition to allow for continued use of virgin HCFC-225ca/cb as a solvent by persons with HCFC-225ca/cb in their inventory would be sufficient to meet the anticipated solvent needs for specialized, niche applications that are not able to transition to alternatives prior to 2015. EPA is proposing such an exemption in section III.B.1. of this preamble.

*G. What is EPA Proposing to Do With the HCFC-141b Exemption Program?*

The HCFC-141b exemption program has been in place since the start of the HCFC allowance program in 2003. In the preamble to the 2009 Final Rule, EPA stated that the petition process for HCFC-141b exemption allowances at section 82.16(h) would end in 2015, since HCFC-141b is not used as a refrigerant and thus does not meet the criteria established by section 605(a) for continued use. HCFC-141b similarly is not used as a fire suppression agent. EPA is proposing to revise 40 CFR 82.16, which is the section of subpart A that addresses the phaseout schedule of class II controlled substances. The date limitation on the HCFC-141b petition process can already be seen by comparing section 82.16(b), which lists "HCFC-141b exemption needs" as one of the exceptions to the HCFC-141b phaseout, with section 82.16(d), which does not include HCFC-141b exemption needs in the list of exceptions that continue beyond January

1, 2015. However, the HCFC-141b petition process in 82.16(h) does not specify an end date. EPA is proposing to remove the HCFC-141b petition process from the regulations effective January 1, 2015. Removing the text will clarify that EPA will not grant petitions, whether new or existing, for HCFC-141b exemption allowances in 2015 or beyond.

In recent years the amount of HCFC-141b imported or produced has been decreasing significantly. The agency does not anticipate there will be any remaining need for HCFC-141b import or production starting in 2015. Excluding transshipments, heels or used material, the regulations at 40 CFR 82.15(g)(3) limit the use or introduction into interstate commerce of HCFC-141b to export to Article 5 countries and use in transformation or destruction processes, beginning January 1, 2015. Despite the strict limits on HCFC-141b *use* in 82.15(g)(3), EPA appreciates that some current users of HCFC-141b may face a similar situation as users of HCFC-225ca/cb. That is, there may be users with HCFC-141b inventory that will not be allowed to use any remaining HCFC-141b after 2014. The agency has not heard from any HCFC-141b users, and thus does not anticipate the need for any exemption to the use restrictions for HCFC-141b; however, EPA welcomes comment on whether there are remaining niche uses of HCFC-141b. Commenters should explain the use and the quantity of HCFC-141b needed, why alternatives or used HCFC-141b cannot meet this need and the plan for transitioning to alternatives.

#### *H. Other HCFCs that are Class II Controlled Substances*

To date, EPA has not established baselines or issued allowances for the production or import of HCFCs that are not included in the tables at 40 CFR 82.16(a). The prohibitions in 40 CFR 82.15(a) and (b) on production and import without allowances do not apply to such HCFCs. However, the phaseout schedule in 40 CFR 82.16 applies to all class II substances, whether or

not they are governed by the allowance system. Similarly, all class II substances are subject to the restrictions on introduction into interstate commerce and use contained in 40 CFR 82.15(g). HCFCs that EPA has listed as class II controlled substances are identified in appendix B to subpart A.

Beginning January 1, 2015, the use of all class II substances is banned, unless specifically exempted (see section III.B. of this preamble for more details). EPA is seeking comment on whether any of the HCFCs not governed by the allowance system qualify for the nonresidential fire suppression and/or refrigeration servicing exemptions and what quantity the market will need going forward for these purposes. Should the need for any of these chemicals grow or potentially put the United States in danger of not meeting its commitments under the Montreal Protocol, EPA would consider establishing baselines and allocating calendar-year allowances via a separate rulemaking.

As mentioned earlier in section III.B. of this preamble, EPA is proposing to amend the list of class II controlled substances in appendix B of subpart A to better match the Clean Air Act section 602 and the Montreal Protocol HCFC lists (found in Group I to Annex C of the Protocol). Currently, both the Protocol and CAA section 602 include all isomers of listed substances, but 40 CFR part 82 subpart A, appendix B does not include all isomers, only those that are specifically named (e.g., HCFC-141b is listed as such, but there are other isomers of HCFC-141 that are not included in appendix B). CAA section 602 states that EPA “shall publish” a list of class II substances that shall include the specified HCFCs and “shall also include the isomers” of those substances. EPA’s intent was to list all isomers in appendix B, as indicated by the footnote explaining that when a range of ODPs is listed for a chemical, the range applies to an isomeric group. The proposed change would correct this omission. Specifically, EPA is proposing to

reconcile the statutory and Montreal Protocol lists with the list in the regulations, and to add a statement that appendix B of the regulations includes all isomers of a listed chemical, even if the isomer itself is not listed on its own.

## **VI. What Other Adjustments to the HCFC Allocation System is EPA Considering?**

### *A. Will EPA Consider Banning Dry-Shipped HCFC-22 Condensing Units?*

Condensing units are a type of component in split system air conditioners. Under current regulations, the sale or distribution of a condensing unit pre-charged with HCFC-22 is prohibited (40 CFR 82 subpart I); however, a dry-shipped unit may be sold and used to repair an existing system that uses HCFC-22 as the refrigerant. In February 2011, the Carrier Corporation sent a letter to EPA, asking the agency to ban this particular type of repair. In the proposed rule providing 2012-2014 HCFC-22 allocations (77 FR 237), EPA took comment on whether repairs using dry-shipped condensing units affect the phaseout of HCFC-22. The agency received numerous comments, and responded to them in the 2013 Final Rule (78 FR 20004). While many comments discussed dry-shipped condensing units, very few provided EPA any additional data or information to indicate that repairs using condensing units affect the HCFC phaseout. The agency is again seeking quantifiable information on the number of dry-shipped condensing units being shipped, whether they are being used as a repair in lieu of a compressor or motor replacement, and whether and to what extent condensing unit replacements extend the life of an existing system. The agency continues to assess whether or not dry-shipped units jeopardize the agency's ability to phase out and ensure a smooth transition from HCFC-22. If the agency believes its ability to phase out HCFC-22 smoothly is jeopardized, EPA would consider proposing a ban via a separate rulemaking process.

*B. How Will EPA Respond to Requests for Additional Consumption Allowances in 2020 and Beyond?*

Currently, the regulations at 82.20(a) allow a person to obtain consumption allowances equivalent to the quantity of class II controlled substances that the person exported during the control period, provided that the substances were originally produced or imported with consumption allowances. The exporter must submit certain information to EPA which the agency reviews before issuing a notice either denying the request, or granting the additional consumption allowances. A person may submit this request (known as a Request for Additional Consumption Allowances, or RACA) upon *export* of any HCFC for which consumption allowances were originally expended, regardless of what control period the production or import took place. As the phaseout deadline approaches for certain HCFCs, the agency believes it makes sense to restrict RACAs accordingly. For example, 1,000 kg of HCFC-22 could be produced in 2019 using consumption and production allowances. In 2020, or some later year, that material could be exported—and under the current regulations the exporter would be eligible to request 1,000 additional HCFC-22 consumption allowances; however, there will not be any consumption allowances for HCFC-22 in 2020 or subsequent years.

The agency believes that issuing additional consumption allowances past the phaseout date for an HCFC—thereby allowing for continued import—would be contrary to the goals of a program that has purposefully set phaseout dates based on a worst-first approach. Continuing to issue RACAs beyond the phaseout date for a substance would also be contrary to past EPA actions for class I substances. For class I substances, the option to obtain consumption allowances equivalent to the level of class I controlled substances that the person exported was available for most class I substances only until January 1, 1996, which was the phaseout date for

CFCs and most other class I substances, and until January 1, 2005 for class I group VI substances (i.e. methyl bromide), which was the phaseout date for that substance. Therefore, EPA is proposing to add the following sentence to paragraph 82.20(a): “Both the export of the class II controlled substance and the request for additional consumption allowances must occur during a calendar year in which consumption allowances were issued for that class II controlled substance.” EPA welcomes comment on its proposed addition to 82.20, and on its proposal to treat class II RACAs the same as it treated the request for additional consumption allowances for class I substances.

*C. How Might EPA Maximize Compliance With HCFC Regulations?*

EPA is interested in comments and suggestions for ensuring compliance with HCFC regulations. EPA recognizes that the 2015 stepdown and the approaching complete phaseout of HCFC-22 may affect prices, which could have the effect of increasing the incentives for illegal activity, particularly illegal imports of HCFCs or HCFC blends. On the other hand, the agency believes that reduced allocations and market changes increasing the value of the material will encourage proper recovery and decrease motivation to vent HCFCs, especially HCFC-22. EPA seeks comment on how it could alter existing regulations to encourage compliance with the HCFC phaseout requirements and section 608 refrigerant regulations. In addition, the agency is interested in ways it could increase awareness and ensure compliance with the section 605(a) use restrictions and the section 611 labeling requirements that will begin in 2015.

**VII. What Modifications to Section 608 Regulations is EPA Proposing?**

The portion of the stratospheric ozone regulations titled *Recycling and Emissions Reduction* (40 CFR 82 subpart F) contains requirements promulgated under CAA section 608. The section 608 requirements are intended to: “reduce emissions of class I and class II

refrigerants and their substitutes to the lowest achievable level,” by designing standards for the use of “refrigerants during the service, maintenance, repair, and disposal of appliances” (40 CFR 82.150). To support this goal, EPA is proposing to update its reclamation standards.

*A. Overview of Current Reclamation Standards*

Recovered refrigerant often contains contaminants, including air, water, particulates, acids, chlorides, high boiling residues, and other impurities. Reclamation is the re-processing and upgrading of a recovered controlled substance through such mechanisms as filtering, drying, distillation, and chemical treatment in order to restore the substance to a specified standard of performance. EPA regulations at 40 CFR 82.152 define reclaim as “. . . to reprocess refrigerant to all of the specifications in appendix A to 40 CFR part 82, subpart F (based on ARI Standard 700-1995, *Specification for Fluorocarbons and Other Refrigerants*) that are applicable to that refrigerant and to verify that the refrigerant meets these specifications using the analytical methodology prescribed in Section 5 of appendix A of 40 CFR part 82, subpart F.” Before a used refrigerant may re-enter the market place, it must be reclaimed to the purity level specified by the regulations, and its purity must be verified (40 CFR 82.154(g)).

*B. Benefits of Reclamation*

EPA believes that proper recovery, recycling or reclamation, and reuse of HCFC-22 and other ODS refrigerants is an essential component of stratospheric protection. Refrigerant reuse is preferable to venting or destruction. Recovery and reuse reduces emissions of HCFCs to the atmosphere. Reuse also reduces the amount of virgin material that needs to be produced. Section 608 of the CAA prohibits knowingly venting HCFCs due to the adverse effects on stratospheric ozone, and EPA regulations require that HCFCs be recovered during service or disposal of appliances and then be either recycled, reclaimed, or destroyed.

Recovery and reuse is becoming increasingly important as the United States continues its progress in the phaseout of ODS. As discussed earlier in this preamble, in 2015 the United States consumption cap for HCFCs will decrease from 3,810 ODP-weighted metric tons to 1,524 ODP-weighted metric tons (i.e. 10 percent of baseline).

*C. Regulatory Changes that EPA is Proposing Under Section 608 Authority*

*1. Adoption of AHRI 700-2012 Standards*

On July 24, 2003 (68 FR 43786), EPA adopted the requirements of ARI Standard 700-1995 into its regulation as appendix A of 40 CFR 82 subpart F. EPA has not updated its use of this standard since then. The current version of the ARI (now AHRI) Standard 700 is 700-2012, including addenda added in August 2008 and August 2012 (*AHRI 700C-2008: Appendix C to AHRI Standard 700-Analytical Procedures for AHRI Standard 700-06* and *AHRI 700D-2012: Appendix D Gas Chromatograms for AHRI Standard 700-2012-Informative*, all three of which are included in the docket). Appendix A to subpart F has not kept pace with these revisions. It lacks the most up-to-date listing of refrigerants, purity requirements and changes to analytical methodologies. EPA's intent is for reclaimers to use the most recent AHRI standards as reclamation technology changes, and the agency would like its regulations to reflect the best technical information and industry practices. For that reason EPA is proposing to revise appendix A to reflect the most recent set of AHRI standards, thereby keeping abreast of advances in the reclamation industry. Under this option, EPA would replace Appendix A's current text with the text in AHRI 700-2012 and its appendices. EPA also intends to revise the definition of "reclaim" to reflect this update to appendix A.

Alternatively, rather than continue its practice of modifying the language of appendix A to accommodate revisions to AHRI Standard 700 (in this case, to AHRI Standard 700-2012),

EPA is proposing to cross-reference AHRI Standard 700-2012 directly, eliminating the need for reproducing the entire standard in appendix A. Such an approach, known as incorporation by reference, allows a Federal agency to comply with the requirement to publish rules in the Federal Register by referring to materials already published elsewhere. The legal effect of incorporation by reference is that the material is treated as if it were published in the Federal Register. When EPA incorporates material by reference, it references a specific version of the material instead of providing a “generic” reference. Here, EPA is proposing to refer specifically to AHRI Standard 700-2012 *Specification for Fluorocarbon Refrigerants* and not to “AHRI Standard 700” or “the most recent version of AHRI Standard 700.” The proposed regulatory text incorporates by reference AHRI Standard 700-2012 at appendix A to subpart F, and changes the definition of reclaim to the updated standard incorporated by reference at appendix A.

EPA believes incorporating AHRI Standard 700-2012 by reference, and deleting the text in appendix A, has several advantages. AHRI standards are published standards, they are widely known to and used by the persons affected by this regulation, and they are available free of charge at [www.ahrinet.org/standards.aspx](http://www.ahrinet.org/standards.aspx). Referencing the AHRI standard, in lieu of duplicating it in appendix A, would reduce any potential confusion about the relationship between the two sets of requirements. It would also substantially reduce the amount of material published in the Federal Register and Code of Federal Regulations. On the other hand, EPA recognizes that there is an advantage to including the requirements of the standard in an appendix to its own regulation, avoiding the need to search for the 2012 version of the technical standard and providing certainty that compliance with appendix A (although possibly outdated) constitutes compliance with EPA regulations. EPA seeks comment on incorporation by reference of a specific version of the AHRI 700 standard, as compared to revising appendix A to reflect a

specific version. EPA also seeks comment on whether the definition of “reclaim” should contain other aspects that are not reflected in the AHRI standard, or conversely, whether there are aspects of the AHRI standard that are not appropriate to include in the regulatory definition.

## *2. Notification to EPA if Change in Business, Management, Location or Contact Information*

Reclaimer certification does not transfer when there is a change in ownership. Section 40 CFR 82.164(f) requires the new owner of the reclamation company to certify with EPA within thirty days of the change of ownership; however, there are no provisions that a reclamation company must notify EPA of changes in business management, location or contact information. EPA believes that notification of changes in business information would improve accountability and benefit reclaimers in the long run. Without accurate information, EPA may not be able to communicate with a reclaimer in a timely manner, potentially causing unnecessary burden to the reclaimer. For example, if EPA does not receive an annual report from a reclaimer, the agency wants to be able to contact the reclaimer by phone or mail to follow up. If there is no response from the company, EPA sends a certification revocation letter. Prior to revoking a reclaimer certification, EPA would prefer to contact the company to find out what happened to their annual reclaim report. Additionally, as a benefit to the public, the agency wants to ensure that the website listing certified reclaimers and their contact information is up-to-date. EPA is seeking comment on its proposal to require notification from the reclaimer when there is a change in business management, location or contact information (i.e., for the refrigerant manager who communicates with EPA).

## *3. Reporting and Recordkeeping Requirements*

EPA's ability to verify whether reclaimers are complying with section 608 regulations is limited. Currently, 40 CFR 82.166(h) requires that reclaimers, on an annual basis, report how much material was received, how much they reclaimed, and the amount of waste product generated as a result of reclamation activities. Under paragraph 82.166(g) refrigerant reclaimers must also maintain records of the names and addresses of persons sending them material for reclamation and the quantity of material (combined mass of refrigerant and contaminant) sent to them for reclamation on a transactional basis. However, the regulations do not clearly state that information must be broken down by refrigerant type. Some reclaimers do submit information broken down by refrigerant, and EPA typically asks for refrigerant-specific information when it is not provided. This information is used as part of an overall review of refrigerant supply to help ensure the continued smooth transition out of ODS refrigerants. The agency believes it is essential for EPA and the public to have accurate information concerning the amounts of specific types of refrigerants that are available from reclaimers for reuse, and is therefore proposing to clarify the regulations to require disaggregated information for all reclaimed refrigerants as part of the annual reporting. The agency is proposing to revise paragraph 82.166(h) to read:

“Reclaimers must maintain records of the quantity of material (the combined mass of refrigerant and contaminants) sent to them for reclamation, the mass of *each* refrigerant reclaimed, and the mass of waste products. Reclaimers must report this information to the Administrator annually within 30 days of the end of the calendar year.” This information is typically maintained by reclaimers and in current practice is either included in the initial report to EPA or transmitted in response to a specific request; therefore the agency does not believe this proposed option increases reporting burden. The agency hopes that this proposed change will clarify what information it needs from reclaimers up front, and will alleviate the need for additional back-

and-forth between EPA and reclamation companies that in the past were not submitting refrigerant-specific data, thereby potentially reducing reporting burden.

EPA also believes that in the future it may be beneficial to have an accountability system that tracks refrigerant material at reclaimer facilities on a longer time scale. 40 CFR 82.164(c) mandates that no more than 1.5 percent of total refrigerant reclaimed shall be released during the reclamation process. However, emissions can occur from leaks in tubing, valves and other loss pathways and may not be recorded or tracked. To increase accountability and awareness of any leaks or losses, in the future EPA could require reclaimers to regularly report, by refrigerant type, how much is in inventory, including storage, regardless of when material was received. Based on information available to the agency (Stratus, 2010), EPA believes that reclaimers generally could support these modest changes. EPA believes that inventory information is routinely maintained by reclaimers in the course of normal business activity, and that the burden of reporting it to EPA would be minimal.

EPA is seeking input on future possible reporting and recordkeeping changes that would help minimize emissions and facilitate a smooth transition away from ODS. Commenters should consider what evidence, if any, reclaimers should submit to verify their product is meeting AHRI-700 standards, what format results should be reported in, and whether summary results would be acceptable. EPA is taking comment on the benefits of requiring reporting of testing sample results, and the mechanisms that exist for EPA to validate that samples are representative samples of reclaimer product. Additionally, the agency is seeking information on the various mechanisms for material loss during the reclamation process, and whether the losses can be quantified.

#### *4. Technical and Process Information Required in Reclaimer Certification Application*

The reclamation regulations at 40 CFR 82.164(e)(2) include a general requirement to submit “a list of equipment used to reprocess and analyze the refrigerant.” This requirement, dating to the May 14, 1993 final rule, titled “Protection of Stratospheric Ozone; Refrigerant Recycling,” (58 FR 28660), was included to help EPA ensure that an applicant would own and use equipment that achieves AHRI 700 standards. Given the general language of this requirement, submissions are often incomplete or vague, forcing EPA to request additional information from the applicant. As the reclamation industry has matured, EPA has developed a more precise understanding of technical information, which, if submitted with a certification, would enable the agency to more reliably assess a reclaimer’s ability to achieve AHRI standards and minimize emissions.

While EPA is not proposing changes to this requirement in this rulemaking, EPA seeks comment on whether developing a more robust reclaimer certification process that requires more specific information would clarify EPA’s expectations for submitted certification information and minimize refrigerant leaks. The agency believes that reclaimers maintain this information as part of good business practice, and that the burden of providing it to EPA as part of a certification application would be small. Specifically, the agency is seeking comment on the importance for EPA to collect the following information and the burden that would be imposed by requiring it to be submitted: (1) Detailed description of technology applied to achieve the applicable AHRI Standard 700 requirements. If home-engineered, the certification would include a schematic. If off-the-shelf, the applicant would provide (1) the make, manufacturer, and serial number; (2) Batch capacity; (3) Types of refrigerant to be reclaimed by reclaimer and standard operating procedures for reclaiming those refrigerants; (4) Information on the instrumentation and methodology that meets AHRI 700 requirements for determination of acidity, determination

of moisture, determination of chloride, determination of non-condensable, determination of impurities, including other refrigerants, or, for reclaimers that send refrigerant to an outside lab for analysis, a certified letter from the outside lab identifying the methodology that meets the AHRI 700 standards. In addition, the agency is considering adding a provision to the regulations that clarifies what information is necessary in order for EPA to approve certification. The agency is also considering a new requirement that reclaimers submit a partial recertification if they plan to accept refrigerants that are not addressed in its current certification or if the reclaimer decides to use a different type of reclamation equipment, thereby ensuring the agency can assess whether they have the capability to properly process all refrigerants they receive. EPA welcomes comment on other triggers for requiring recertification, for example, a significant change in the type of reclamation equipment.

#### *5. Expanded End Product Testing Requirements*

EPA is interested in potentially expanding the requirements for sampling and testing of reclaimed refrigerant in a future agency rulemaking. Currently, the definition of “reclaim” says that reclaimers are required to verify that reclaimed refrigerant meets the AHRI Standard specifications using the analytical methodology in Section 5 of appendix A of subpart F. Section 5 contains requirements for sampling, test methods, and maximum permissible contaminant levels of reclaimed refrigerant. However, the regulations do not specify how often, or on what basis, reclaimers must use the Section 5 methodology. EPA’s concern is that it does not have current knowledge on the quality of reclaimer product, and the agency is therefore interested in ways to verify that reclaimed refrigerant is of acceptable quality. It is possible that some reclaimed refrigerant entering the market does not meet the AHRI standard and is being illegally vented due to the high cost associated with disposition or destruction of the material.

Section 5 of appendix A, as well as AHRI 700-2012, contains test methods but does not specify testing frequency or requirements for reporting test results. EPA is seeking information on what specific criteria end product testing and reporting could be based on in order to help validate that reclaimed product is meeting AHRI 700 standards. Specifically, the agency is interested in: sampling procedures and specific testing protocols beyond what is currently in section 5; how frequently testing should be required; how a batch of refrigerant would be defined and whether testing should be on a per batch basis, or if multiple tests should be required and on what time frame. Additionally, EPA is interested in how it could ensure product quality, for example, by requiring third party certification for all reclaimers, and the advantages and disadvantages to such an approach. The agency notes that technicians must be certified by a third party in order to service equipment containing ODS, and is interested in how a third party certification for reclaimers could be similar or different.

## **VIII. Statutory and Executive Order Reviews**

### *A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review*

Under Executive Order (EO) 12866 (58 FR 51735, October 4, 1993), this action is a "significant regulatory action" since it raises "novel legal or policy issues." Accordingly, EPA submitted this action to the Office of Management and Budget (OMB) for review under Executive Orders 12866 and 13563 (76 FR 3821, January 21, 2011) and any changes made in response to OMB recommendations have been documented in the docket for this action.

EPA did not conduct a specific analysis of the benefits and costs associated with this action. Many previous analyses provide a wealth of information on the costs and benefits of the United States HCFC phaseout including:

- The 1993 *Addendum to the 1992 Phaseout Regulatory Impact Analysis: Accelerating the Phaseout of CFCs, Halons, Methyl Chloroform, Carbon Tetrachloride, and HCFCs*.
- The 1999 Report *Costs and Benefits of the HCFC Allowance Allocation System*.
- The 2000 Memorandum *Cost/Benefit Comparison of the HCFC Allowance Allocation System*.
- The 2005 Memorandum *Recommended Scenarios for HCFC Phaseout Costs Estimation*.
- The 2006 ICR *Reporting and Recordkeeping Requirements of the HCFC Allowance System*.
- The 2007 Memorandum *Preliminary Estimates of the Incremental Cost of the HCFC Phaseout in Article 5 Countries*.
- The 2007 Memorandum *Revised Ozone and Climate Benefits Associated with the 2010 HCFC Production and Consumption Stepwise Reductions and a Ban on HCFC Pre-charged Imports*.

A memorandum summarizing these analyses is available in the docket.

*B. Paperwork Reduction Act*

The Office of Management and Budget (OMB) has previously approved the information collection requirements contained in the existing regulations at 40 CFR part 82, subpart A under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. and has assigned OMB control number 2060-0498. The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR part 9.

However, EPA is proposing modifying the regulations covering recordkeeping and reporting contained in the existing regulations at 40 CFR part 82, subpart F, which were approved by OMB under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq.

under OMB control number 2060-0256. The two modifications, (1) requiring reclaimers to provide updated contact information and (2) requiring reclaimers to provide the amount of each refrigerant reclaimed in their annual reporting, are already customary business practices and therefore do not affect information collection burden. In both of these cases, EPA is modifying the regulations so they align with current practices.

*C. Regulatory Flexibility Act (RFA)*

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute, unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions. For purposes of assessing the impacts of this rulemaking on small entities, a small entity is defined as: (1) a small business as defined by the Small Business Administration's (SBA) regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

This action will affect the following categories:

- Industrial Gas Manufacturing entities (NAICS code 325120), including fluorinated hydrocarbon gas manufacturers and reclaimers;
- Other Chemical and Allied Products Merchant Wholesalers (NAICS code 424690), including chemical gases and compressed gases merchant wholesalers;

- Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing entities (NAICS code 333415), including air-conditioning equipment and commercial and industrial refrigeration equipment manufacturers;
- Air-Conditioning Equipment and Supplies Merchant Wholesalers (NAICS code 423730) , including air-conditioning (condensing unit, compressors) merchant wholesalers;
- Electrical and Electronic Appliance, Television, and Radio Set Merchant Wholesalers (NAICS code 423620), including air-conditioning (room units) merchant wholesalers;
- Plumbing, Heating, and Air-Conditioning Contractors (NAICS code 238220), including Central air-conditioning system and commercial refrigeration installation, HVACR contractors; and
- Refrigerant reclaimers, manufacturers of recovery/recycling equipment, and refrigerant recovery/recycling equipment testing organizations.

After considering the economic impacts of this proposed rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. In determining whether a rule has a significant economic impact on a substantial number of small entities, the impact of concern is any significant adverse economic impact on small entities, since the primary purpose of the regulatory flexibility analyses is to identify and address regulatory alternatives “which minimize any significant economic impact of the rule on small entities.” 5 USC 603 and 604. Thus, an agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves

regulatory burden, or otherwise has a positive economic effect on all of the small entities subject to the rule.

Without allowances for the 2015-2019 regulatory period, existing regulations would prohibit production and import of HCFCs, thus the proposal to issue allowances is not a potential burden to small business. EPA's HCFC Phaseout Benefits and Costs Memo, included in the docket for this rulemaking, provides a summary of previous small business analyses. Also, under section 608 of the CAA and 40 CFR subpart F, EPA is proposing some minor modifications to recordkeeping and reporting provisions; however, these proposed changes are to lessen burden on small reclamation businesses by ensuring that businesses that have already reported do not have to spend additional time responding to follow-up requests from EPA, and so that EPA can reach businesses in a timely manner with any necessary information. We have therefore concluded that this proposed rule will relieve regulatory burden for all affected small entities. We continue to be interested in the potential impacts of the proposed rule on small entities and welcome comments on issues related to such impacts.

*D. Unfunded Mandates Reform Act*

This action contains no Federal mandates under the provisions of Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), 2 U.S.C. 1531-1538 for State, local, or tribal governments or the private sector. UMRA does not apply to rules that are necessary for the national security or the ratification or implementation of international treaty obligations. This proposed rule would implement the 2015 milestone for the phase-out of HCFCs under the Montreal Protocol. Therefore, this action is not subject to the requirements of sections 202 or 205 of the UMRA.

This action is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments. This action apportions production and consumption allowances and establishes baselines for private entities, not small governments.

*E. Executive Order 13132: Federalism*

This action does not have federalism implications. It does not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. This action is expected to primarily affect producers, importers, and exporters of HCFCs. Thus, Executive Order 13132 does not apply to this action. In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and State and local governments, EPA specifically solicits comment on this proposed action from State and local officials.

*F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments*

This action does not have tribal implications, as specified in Executive Order 13175 (65 FR 67249, November 9, 2000). This action does not significantly or uniquely affect the communities of Indian tribal governments. It does not impose any enforceable duties on communities of Indian tribal governments. Thus, Executive Order 13175 does not apply to this action. EPA specifically solicits additional comment on this proposed action from tribal officials.

*G. Executive Order 13045: Protection of Children from Environmental Health and Safety Risks*

This action is not subject to EO 13045 (62 F.R. 19885, April 23, 1997) because it is not economically significant as defined in EO 12866. The Agency nonetheless has reason to believe

that the environmental health or safety risk addressed by this action may have a disproportionate effect on children. Depletion of stratospheric ozone results in greater transmission of the sun's ultraviolet (UV) radiation to the earth's surface. The following studies describe the effects of excessive exposure to UV radiation on children: (1) Westerdahl J, Olsson H, Ingvar C. "At what age do sunburn episodes play a crucial role for the development of malignant melanoma," *Eur J Cancer* 1994; 30A: 1647-54; (2) Elwood JM Japson J. "Melanoma and sun exposure: an overview of published studies," *Int J Cancer* 1997; 73:198-203; (3) Armstrong BK, "Melanoma: childhood or lifelong sun exposure," In: Grobb JJ, Stern RS Mackie RM, Weinstock WA, eds. "Epidemiology, causes and prevention of skin diseases," 1<sup>st</sup> ed. London, England: Blackwell Science, 1997: 63-6; (4) Whiteman D., Green A. "Melanoma and Sunburn," *Cancer Causes Control*, 1994: 5:564-72; (5) Heenan, PJ. "Does intermittent sun exposure cause basal cell carcinoma? A case control study in Western Australia," *Int J Cancer* 1995; 60: 489-94; (6) Gallagher, RP, Hill, GB, Bajdik, CD, et. al. "Sunlight exposure, pigmentary factors, and risk of nonmelanocytic skin cancer I, Basal cell carcinoma," *Arch Dermatol* 1995; 131: 157-63; (7) Armstrong, DK. "How sun exposure causes skin cancer: an epidemiological perspective," *Prevention of Skin Cancer*. 2004. 89-116.

This action implements the United States' commitment to reduce the total basket of HCFCs produced and imported to a level that is 90 percent below the respective baselines. While on an ODP-weighted basis, this is not as large a step as previous actions, such as the 1996 class I phaseout, it is one of the most significant remaining actions the United States can take to complete the overall phaseout of ODS and further decrease impacts on children's health from stratospheric ozone depletion.

*H. Executive Order 13211: Actions that Significantly Affect Energy Supply, Distribution, or Use*

This action is not a “significant energy action” as defined in Executive Order 13211 (66 FR 28355, May 22, 2001), because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. This proposed rule would issue allowances for the production and consumption of HCFCs.

*I. National Technology Transfer and Advancement Act*

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 ("NTTAA"), Public Law No. 104-113, 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards. This proposed rule involves technical standards. Through this action, EPA is proposing to incorporate by reference AHRI Standard 700-2012 *Specification for Fluorocarbons and Other Refrigerants* and its appendices, which is available in the docket for this rulemaking and online at <http://www.ahrinet.org/search+standards.aspx>. This industry standard for refrigerant reclamation is an updated version of the standard contained in the current regulations.

EPA welcomes comments on this aspect of the proposed rulemaking and, specifically, invites the public to identify potentially-applicable voluntary consensus standards and to explain why such standards should be used in this regulation.

*J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*

Executive Order (EO) 12898 (59 FR 7629, Feb. 16, 1994) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

EPA has determined that this action will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because the 2015 phaseout step increases the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population, including any minority or low-income population. This action continues the implementation of the United States commitment to reduce the total basket of HCFCs produced and imported to a level that is 90 percent below the respective baselines. While on an ODP-weighted basis, this is not as large a step as previous actions, such as the 1996 class I phaseout, it is one of the most significant remaining actions the United States can take to complete the overall phaseout of ODS and further lessen the adverse human health effects for the entire population.

**List of Subjects in 40 CFR Part 82**

Environmental protection, Administrative practice and procedure, Air pollution control, Chemicals, Exports, Hydrochlorofluorocarbons, Imports, Incorporation by reference

**Dated:** December 5, 2013.

**Gina McCarthy,**

**Administrator.**

40 CFR part 82 is proposed to be amended to read as follows:

**PART 82-PROTECTION OF STRATOSPHERIC OZONE**

1. The authority citation for part 82 continues to read as follows:

**Authority:** 42 U.S.C. 7414, 7601, 7671– 7671q.

**Subpart A—Production and Consumption Controls**

2. Amend § 82.3 by adding the definition of “Use of a class II controlled substance” to read as follows:

**§ 82.3 Definitions for class I and class II controlled substances.**

\* \* \* \* \*

*Use of a class II controlled substance*, for the purposes of 82.15 of this subpart, includes but is not limited to use in a manufacturing process, use in manufacturing a product, intermediate uses such as formulation or packaging for other subsequent uses, and use in maintaining, servicing, or repairing an appliance or other piece of equipment. Use of a class II controlled substance also includes use of that controlled substance when it is removed from a container used for the

transportation or storage of the substance but does not include use of a manufactured product containing a controlled substance.

\* \* \* \* \*

3. Amend § 82.15 by revising paragraph (g)(4) to read as follows:

**§ 82.15 Prohibitions for class II controlled substances.**

\* \* \* \* \*

(g) \* \* \*

(4)(i) Effective January 1, 2015, no person may introduce into interstate commerce or use any class II controlled substance not governed by paragraphs (g)(1) through (3) of this section (unless used, recovered and recycled) for any purpose other than for use in a process resulting in its transformation or its destruction; for use as a refrigerant in equipment manufactured before January 1, 2020; for use as a fire suppression streaming agent listed as acceptable for use or acceptable subject to narrowed use limits for nonresidential applications in accordance with the regulations at subpart G of this part; for export to Article 5 Parties under § 82.18(a); as a transshipment or heel; for exemptions permitted under paragraph (f) of this section; or for exemptions permitted under paragraph (g)(4)(ii) of this section.

(ii) Effective January 1, 2015, use of HCFC-225ca or HCFC-225cb as a solvent (excluding use in manufacturing a product containing HCFC-225ca or HCFC-225cb) is not subject to the use prohibition in paragraph (g)(4)(i) of this section if the person using the HCFC-225ca or HCFC-225cb placed the controlled substance into inventory before January 1, 2015. This paragraph does not create an exemption to the prohibition on introduction into interstate commerce in paragraph (g)(4)(i) of this section.

\* \* \* \* \*

4. Amend § 82.16 by revising paragraphs (a), (d) and (e) and removing and reserving paragraph (h) to read as follows:

**§ 82.16 Phaseout schedule of class II controlled substances.**

(a) *Calendar-year Allowances.* (1) In each control period as indicated in the following tables, each person is granted the specified percentage of baseline production allowances and baseline consumption allowances for the specified class II controlled substances apportioned under §§ 82.17 and 82.19:

Calendar-year HCFC Production Allowances

Control Period	Percent of HCFC-141b	Percent of HCFC-22	Percent of HCFC-142b	Percent of HCFC-123	Percent of HCFC-124	Percent of HCFC-225ca	Percent of HCFC-225cb
2003	0	100	100	--	--	--	--
2004	0	100	100	--	--	--	--
2005	0	100	100	--	--	--	--
2006	0	100	100	--	--	--	--
2007	0	100	100	--	--	--	--
2008	0	100	100	--	--	--	--
2009	0	100	100	--	--	--	--
2010	0	41.9	0.47	0	125	125	125
2011	0	32.0	4.9	0	125	125	125
2012	0	17.7	4.9	0	125	125	125
2013	0	30.1	4.9	0	125	125	125
2014	0	26.1	4.9	0	125	125	125
2015	0	21.7	0.37	0	5.0	0	0
2016	0	21.7	0.32	0	5.0	0	0
2017	0	21.7	0.26	0	5.0	0	0
2018	0	21.7	0.21	0	5.0	0	0
2019	0	21.7	0.16	0	5.0	0	0

Calendar-year HCFC Consumption Allowances

Control Period	Percent of HCFC-141b	Percent of HCFC-22	Percent of HCFC-142b	Percent of HCFC-123	Percent of HCFC-124	Percent of HCFC-225ca	Percent of HCFC-225cb
2003	0	100	100	--	--	--	--
2004	0	100	100	--	--	--	--
2005	0	100	100	--	--	--	--
2006	0	100	100	--	--	--	--
2007	0	100	100	--	--	--	--
2008	0	100	100	--	--	--	--
2009	0	100	100	--	--	--	--
2010	0	41.9	0.47	125	125	125	125
2011	0	32.0	4.9	125	125	125	125
2012	0	17.7	4.9	125	125	125	125
2013	0	18.0	4.9	125	125	125	125
2014	0	14.2	4.9	125	125	125	125
2015	0	9.6	1.7	100	8.3	0	0
2016	0	7.7	1.5	100	8.3	0	0
2017	0	5.8	1.2	100	8.3	0	0
2018	0	3.9	1.0	100	8.3	0	0
2019	0	1.9	0.7	100	8.3	0	0

\* \* \* \* \*

(d) Effective January 1, 2015, no person may produce class II controlled substances not previously controlled for any purpose other than for use in a process resulting in their transformation or their destruction, for use as a refrigerant in equipment manufactured before January 1, 2020, for use as a fire suppression streaming agent listed as acceptable for use or acceptable subject to narrowed use limits for nonresidential applications in accordance with the regulations at subpart G of this part, for export under § 82.18(b) using unexpended Article 5 allowances, or for export under § 82.18(a) using unexpended export production allowances, or for exemption permitted in § 82.15(f). Effective January 1, 2015, no person may import class II controlled substances not subject to the requirements of paragraph (b) or (c) of this section (other

than transshipments, heels or used class II controlled substances) for any purpose other than for use in a process resulting in their transformation or their destruction, for exemption permitted in § 82.15(f), for use as a refrigerant in equipment manufactured prior to January 1, 2020, or for use as a fire suppression streaming agent for nonresidential applications in accordance with the regulations at subpart G of this part.

\* \* \* \* \*

(e)(1) Effective January 1, 2020, no person may produce HCFC-22 or HCFC-142b for any purpose other than for use in a process resulting in their transformation or their destruction, for export under § 82.18(a) using unexpended Article 5 allowances, or for export under § 82.18(b) using unexpended export production allowances, or for exemptions permitted in § 82.15(f).

Effective January 1, 2020, no person may import HCFC-22 or HCFC-142b for any purpose other than for use in a process resulting in their transformation or their destruction, or for exemptions permitted in § 82.15(f).

(2) Effective January 1, 2020, no person may produce HCFC-123 for any purpose other than for use in a process resulting in its transformation or its destruction, for use as a refrigerant in equipment manufactured before January 1, 2020, for export under § 82.18(a) using unexpended Article 5 allowances, or for export under § 82.18(b) using unexpended export production allowances, or for exemptions permitted in § 82.15(f). Effective January 1, 2020, no person may import HCFC-123 for any purpose other than for use in a process resulting in its transformation or its destruction, for use as a refrigerant in equipment manufactured before January 1, 2020 or for exemptions permitted in § 82.15(f).

\* \* \* \* \*

(h) [Reserved].

5. Amend § 82.17 by revising the table to read as follows:

**§ 82.17 Apportionment of baseline production allowances for class II controlled substances.**

The following persons are apportioned baseline production allowances for HCFC-22, HCFC-141b, HCFC-142b, HCFC-123, HCFC-124, HCFC-225ca and HCFC-225cb, as set forth in the following table:

Person	Controlled Substance	Allowances (kg)
AGC Chemicals Americas	HCFC-225ca	266,608
	HCFC-225cb	373,952
Arkema	HCFC-22	46,692,336
	HCFC-141b	24,647,925
	HCFC-142b	484,369
DuPont	HCFC-22	42,638,049
	HCFC-124	2,269,210
Honeywell	HCFC-22	37,378,252
	HCFC-141b	28,705,200
	HCFC-142b	2,417,534
	HCFC-124	1,759,681
MDA Manufacturing	HCFC-22	2,383,835
Solvay Specialty Polymers USA, LLC	HCFC-142b	6,541,764

6. Amend § 82.19 by revising the table to read as follows:

**§ 82.19 Apportionment of baseline consumption allowances for class II controlled substances.**

The following persons are apportioned baseline consumption allowances for HCFC-22, HCFC-142b, HCFC-123, HCFC-124, HCFC-225ca and HCFC-225cb, as set forth in the following table:

Person	Controlled Substance	Allowances (kg)
--------	----------------------	-----------------

ABCO Refrigeration Supply	HCFC-22	279,366
	HCFC-225ca	285,328
AGC Chemicals Americas	HCFC-225cb	286,832
Altair Partners	HCFC-22	302,011
	HCFC-22	48,637,642
	HCFC-141b	25,405,570
	HCFC-142b	483,827
Arkema	HCFC-124	3,719
Carrier	HCFC-22	54,088
Continental Industrial Group	HCFC-141b	20,315
Coolgas, Inc.	HCFC-141b	16,097,869
	HCFC-22	1,040,458
	HCFC-123	19,980
Combes Investment Property	HCFC-124	3,742
Discount Refrigerants	HCFC-141b	994
	HCFC-22	38,814,862
	HCFC-141b	9,049
	HCFC-142b	52,797
	HCFC-123	1,877,042
DuPont	HCFC-124	743,312
H.G. Refrigeration Supply	HCFC-22	40,068
	HCFC-22	35,392,492
	HCFC-141b	20,749,489
	HCFC-142b	1,315,819
Honeywell	HCFC-124	1,284,265
ICC Chemical Corp.	HCFC-141b	81,225
ICOR	HCFC-124	81,220
Mexichem Fluor Inc.	HCFC-22	2,546,305
Kivlan & Company	HCFC-22	2,081,018
MDA Manufacturing	HCFC-22	2,541,545
Mondy Global	HCFC-22	281,824
	HCFC-22	5,528,316
	HCFC-123	72,600
National Refrigerants	HCFC-124	50,380
Perfect Technology Center, LP	HCFC-123	9,100
Refricenter of Miami	HCFC-22	381,293
Refricentro	HCFC-22	45,979
R-Lines	HCFC-22	63,172
Saez Distributors	HCFC-22	37,936

Solvay Fluorides, LLC	HCFC-22	3,781,691
	HCFC-141b	3,940,115
Solvay Specialty Polymers USA, LLC	HCFC-142b	194,536
	HCFC-141b	89,913
Tulstar Products	HCFC-123	34,800
	HCFC-124	229,582
USA Refrigerants	HCFC-22	14,865

7. Amend § 82.20 by revising paragraph (a) introductory text to read as follows:

**§ 82.20 Availability of consumption allowances in addition to baseline consumption allowances for class II controlled substances.**

(a) A person may obtain at any time during the control period, in accordance with the provisions of this section, consumption allowances equivalent to the quantity of class II controlled substances that the person exported from the United States and its territories to a foreign state in accordance with this section, when that quantity of class II controlled substance was produced in the U.S. or imported into the United States with expended consumption allowances. Both the export of the class II controlled substance and the request for additional consumption allowances must occur during a calendar year in which consumption allowances were issued for that class II controlled substance.

\* \* \* \* \*

8. Amend appendix B to subpart A by inserting footnote B following footnote A, to read as follows:

**Appendix B to Subpart A of Part 82—Class II Controlled Substances<sup>A,B</sup>**

Controlled Substance	ODP
1. HCFC-21 (CHFCI <sub>2</sub> ) Dichlorofluoromethane	0.04
2. HCFC-22 (CHF <sub>2</sub> Cl) Monochlorodifluoromethane	0.055
3. HCFC-31 (CH <sub>2</sub> FCI) Monochlorofluoromethane	0.02
4. HCFC-121 (C <sub>2</sub> HFCI <sub>4</sub> ) Tetrachlorofluoroethane	0.01- 0.04

5.	HCFC-122 (C <sub>2</sub> H <sub>2</sub> F <sub>2</sub> Cl <sub>3</sub> ) Trichlorodifluoroethane	0.02 - 0.08
6.	HCFC-123 (C <sub>2</sub> H <sub>2</sub> F <sub>3</sub> Cl <sub>2</sub> ) Dichlorotrifluoroethane	0.02
7.	HCFC-124 (C <sub>2</sub> H <sub>2</sub> F <sub>4</sub> Cl) Monochlorotetrafluoroethane	0.022
8.	HCFC-131 (C <sub>2</sub> H <sub>2</sub> FCl <sub>3</sub> ) Trichlorofluoroethane	0.007-0.05
9.	HCFC-132 (C <sub>2</sub> H <sub>2</sub> F <sub>2</sub> Cl <sub>2</sub> ) Dichlorodifluoroethane	0.008-0.05
10.	HCFC-133 (C <sub>2</sub> H <sub>2</sub> F <sub>3</sub> Cl) Monochlorotrifluoroethane	0.02-0.06
11.	HCFC-141 (C <sub>2</sub> H <sub>3</sub> FCl <sub>2</sub> ) Dichlorofluoroethane	0.005-0.07
12.	HCFC-141b (CH <sub>3</sub> CFCl <sub>2</sub> ) Dichlorofluoroethane	0.11
13.	HCFC-142 (C <sub>2</sub> H <sub>3</sub> F <sub>2</sub> Cl) chlorodifluoroethane	0.008-0.07
14.	HCFC-142b (CH <sub>3</sub> CF <sub>2</sub> Cl) Monochlorodifluoroethane	0.065
15.	HCFC-151 (C <sub>2</sub> H <sub>4</sub> FCl) Chlorofluoroethane	0.003-0.005
16.	HCFC-221 (C <sub>3</sub> HFC <sub>2</sub> Cl <sub>6</sub> ) Hexachlorofluoropropane	0.015 - 0.07
17.	HCFC-222 (C <sub>3</sub> H <sub>2</sub> F <sub>2</sub> Cl <sub>5</sub> ) Pentachlorodifluoropropane	0.01 - 0.09
18.	HCFC-223 (C <sub>3</sub> H <sub>2</sub> F <sub>3</sub> Cl <sub>4</sub> ) Tetrachlorotrifluoropropane	0.01 - 0.08
19.	HCFC-224 (C <sub>3</sub> H <sub>2</sub> F <sub>4</sub> Cl <sub>3</sub> ) Trichlorotetrafluoropropane	0.01 - 0.09
20.	HCFC-225 (C <sub>3</sub> H <sub>2</sub> F <sub>5</sub> Cl <sub>2</sub> ) Dichloropentafluoropropane	0.02-0.07
21.	HCFC-225ca (CF <sub>3</sub> CF <sub>2</sub> CHCl <sub>2</sub> ) Dichloropentafluoropropane	0.025
22.	HCFC-225cb (CF <sub>2</sub> ClCF <sub>2</sub> CHClF) Dichloropentafluoropropane	0.033
23.	HCFC-226 (C <sub>3</sub> H <sub>2</sub> F <sub>6</sub> Cl) Monochlorohexafluoropropane	0.02-0.1
24.	HCFC-231 (C <sub>3</sub> H <sub>2</sub> FCl <sub>5</sub> ) Pentachlorofluoropropane	0.05-0.09
25.	HCFC-232 (C <sub>3</sub> H <sub>2</sub> F <sub>2</sub> Cl <sub>4</sub> ) Tetrachlorodifluoropropane	0.008-0.1
26.	HCFC-233 (C <sub>3</sub> H <sub>2</sub> F <sub>3</sub> Cl <sub>3</sub> ) Trichlorotrifluoropropane	0.007-0.23
27.	HCFC-234 (C <sub>3</sub> H <sub>2</sub> F <sub>4</sub> Cl <sub>2</sub> ) Dichlorotetrafluoropropane	0.01-0.28
28.	HCFC-235 (C <sub>3</sub> H <sub>2</sub> F <sub>5</sub> Cl) Monochloropentafluoropropane	0.03-0.52
29.	HCFC-241 (C <sub>3</sub> H <sub>3</sub> FCl <sub>4</sub> ) Tetrachlorofluoropropane	0.004-0.09
30.	HCFC-242 (C <sub>3</sub> H <sub>3</sub> F <sub>2</sub> Cl <sub>3</sub> ) Trichlorodifluoropropane	0.005-0.13
31.	HCFC-243 (C <sub>3</sub> H <sub>3</sub> F <sub>3</sub> Cl <sub>2</sub> ) Dichlorotrifluoropropane	0.007-0.12
31.	HCFC-244 (C <sub>3</sub> H <sub>3</sub> F <sub>4</sub> Cl) Monochlorotetrafluoropropane	0.009-0.14
33.	HCFC-251 (C <sub>3</sub> H <sub>4</sub> FCl <sub>3</sub> ) Monochlorotetrafluoropropane	0.001-0.01
34.	HCFC-252 (C <sub>3</sub> H <sub>4</sub> F <sub>2</sub> Cl <sub>2</sub> ) Dichlorodifluoropropane	0.005-0.04
35.	HCFC-253 (C <sub>3</sub> H <sub>4</sub> F <sub>3</sub> Cl) Monochlorotrifluoropropane	0.003-0.03
36.	HCFC-261 (C <sub>3</sub> H <sub>5</sub> FCl <sub>2</sub> ) Dichlorofluoropropane	0.002-0.02
37.	HCFC-262 (C <sub>3</sub> H <sub>5</sub> F <sub>2</sub> Cl) Monochlorodifluoropropane	0.002-0.02
38.	HCFC-271 (C <sub>3</sub> H <sub>6</sub> FCl) Monochlorofluoropropane	0.001-0.03

a\* \* \*

b This table includes all isomers of the substances above, regardless of whether the isomer is explicitly listed on its own.

## **Subpart E—The Labeling of Products Using Ozone-Depleting Substances**

9. Amend § 82.110 by revising paragraph (c) title to read as follows:

### **§ 82.110 Form of label bearing warning statement.**

\* \* \* \* \*

(c) *Combined statement for multiple controlled substances* \* \* \*

\* \* \* \* \*

10. Amend § 82.112 by revising paragraph (d) to read as follows:

### **§ 82.112 Removal of label bearing warning statement.**

\* \* \* \* \*

(d) *Manufacturers, distributors, wholesalers, retailers that sell spare parts manufactured with controlled substances solely for repair* Manufacturers, distributors, wholesalers, and retailers that purchase spare parts manufactured with a class I or class II substance from another manufacturer or supplier, and sell such spare parts for the sole purpose of repair, are not required to pass through an applicable warning label if such products are removed from the original packaging provided by the manufacturer from whom the products are purchased. \* \* \*

\* \* \* \* \*

11. Amend § 82.122 by revising paragraph (a)(1) to read as follows:

### **§ 82.122 Certification, recordkeeping, and notice requirements.**

(a) \* \* \* (1) Persons claiming the exemption provided in § 82.106(b)(4) must submit a written certification to the following address: Labeling Program Manager, Stratospheric Protection Division, Office of Atmospheric Programs, 6205-J, 1200 Pennsylvania Ave., NW, Washington DC 20460.

\* \* \* \* \*

## **Subpart F—Recycling and Emissions Reductions**

12. Amend § 82.152 by revising the definition “Reclaim” to read as follows:

### **§ 82.152 Definitions.**

\* \* \* \* \*

*Reclaim* refrigerant means to reprocess refrigerant to all of the specifications in AHRI Standard 700-2012 Specification for Fluorocarbon Refrigerants (incorporated by reference at appendix A to 40 CFR part 82 subpart F) that are applicable to that refrigerant and to verify that the refrigerant meet these specifications using the analytical methodology prescribed therein.

\* \* \* \* \*

13. Amend § 82.164 by revising paragraph (f) to read as follows:

### **§ 82.164 Reclaimer certification.**

\* \* \* \* \*

(f) Certificates are not transferrable. In the event of a change in ownership of an entity which reclaims refrigerant, the new owner of the entity shall certify within 30 days of the change of ownership pursuant to this section. In the event of a change in business management, location or contact information, the owner of an entity shall notify EPA within 30 days of the change.

\* \* \* \* \*

14. Amend § 82.166 by revising paragraph (h) to read as follows:

### **§ 82.166 Reporting and recordkeeping requirements.**

\* \* \* \* \*

(h) Reclaimers must maintain records of the quantity of material (the combined mass of refrigerant and contaminants) sent to them for reclamation, the mass of each refrigerant

reclaimed, and the mass of waste products. Reclaimers must report this information to the Administrator annually within 30 days of the end of the calendar year.

\* \* \* \* \*

15. Revise all text in appendix A to subpart F of Part 82-Specifications for Fluorocarbon and Other Refrigerants to read as follows:

**Appendix A to Subpart F of Part 82—Specifications for Fluorocarbon and Other Refrigerants**

AHRI Standard 700-2012: *Specifications for Fluorocarbon Refrigerants* specifies acceptable levels of contaminants (purity requirements) for fluorocarbon refrigerants and lists acceptable test methods. This appendix incorporates by reference AHRI Standard 700-2012: *Specifications for Fluorocarbon Refrigerants* (2012 edition, Air-Conditioning, Heating, and Refrigeration Institute). The entire standard, including Appendices A and B, are made part of the regulations in part 82 subpart F. Accordance with the specifications in AHRI Standard 700-2012 is required by the relevant regulations of this subpart.

The Director of the Federal Register approves this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You may obtain a copy from AHRI online at: <http://www.ahrinet.org> or by contacting AHRI by **phone**: (+1) 703-524-8800 or by **fax**: (+1) 703-562-1942. You may also obtain a copy in person or by mail at Air-Conditioning, Heating, and Refrigeration Institute (AHRI) 2111 Wilson Blvd, Suite 500 Arlington, VA 22201, USA.

AHRI Standard 700-2012 is also available online at <http://www.regulations.gov/> by searching for docket number: EPA-HQ-OAR-2013-0263. You may also inspect a copy at the United States EPA's Air Docket; EPA West Building, Room 3334; 1301 Constitution Ave., NW.; Washington, DC or at the National Archives and Records Administration (NARA). For

questions regarding access to these standards, the telephone number of EPA's Air Docket is 202-566-1742. For information on the availability of this material at NARA, call 202-741-6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

\* \* \* \* \*

[FR Doc. 2013-29817 Filed 12/23/2013 at 8:45 am; Publication Date: 12/24/2013]